definite attacks of severe malaria or perhaps by frequent slight attacks which are at times not even severe enough to keep the patient in bed and which are therefore neglected In the latter case, though the patient feels a little out of sorts and chilly, he usually disregards it and does not take his temperature, or he may take it and find it to be 100° F , swallow some antipyrin or quinine and go to bed, and then get up the next day feeling rather better and go about his work. I take it that though such a patient would tell you that he had been in good health and had had no fever, yet malarial parasites had been present in his blood the whole time, and that though his power of resistance was just sufficient to keep them from multiplying to any great extent, still all this time they were manufacturing toxins and thus contributing to that toxæmia to which malarial cachexia is due Such persons as these are the subjects who are most liable to suffer from blackwater fever, and I will go further and say that I am certain that when it arises in such cachectics its occurrence is due either to excessive exposure, privation, great fatigue, to some special malignancy of the parasite, or to some indiscretion committed by the patient during an attack of ordinary malaria which might otherwise have passed off without this complication

Cause of hæmoglobinuria —Before discussing the cause of the hæmoglobinuria in blackwater fever we must look at the process by which destruction of hæmoglobin in malaria ordinarily takes place In benign tertian and quartan fevers the parasite destroys the hæmoglobin and turns it into another pigment and when it sporulates this pigment is set free and carried to liver, spleen, and brain, causing the well known malarial pigmentation In the æstivo autumnal fevers the same thing occurs, but the parasites cause the rupture of the corpuscles before the hæmoglobin is completely destroyed, thus causing hæmoglobinæmia In ordinary fevers this free hæmoglobin is taken up by the liver and changed into bile pigment, but none appears in the urine In severe æstivo-autumnal fevers one third of the total number of corpuscles may be destroyed in one paroxysm and yet no hæmoglobinuria occur, the result of the excessive bile formation being bilious remittent fever

For hæmoglobinuria to occur there must be a large number of corpuscles destroyed and a large quantity of hæmoglobin set free in the blood, this is proved by the experimental hæmoglobinuria induced by certain poisons Hence, in order to explain the occurrence of hæmoglobinuria in malaria we are compelled to assume that there is a sudden destruction of corpuscles, thus setting free the whole of their hæmoglobin Evidence in favour of this is to be found in some of the descriptions of the result of examination of fresh blood films during an attack of hæmoglobinuria Thus Manson speaks of the apparent ruin and wholesale solution of the red discs What change can it be that brings about this destruction? A. Plehn suggested that it was some alteration in the specific gravity of the blood causing solution of the red discs I would rather suggest that it was due to the accumulation of malarial toxins As above stated, the patients are cachectic—i e , they are suffering from chronic toxæmia Supposing any thing—e g , chill—should check the excretion of toxins they might accumulate until they were able to effect the direct destruction of the red discs On this theory blackwater fever is to be regarded as a special complication of malaria The hæmoglobinuric complication I regard as wholly analogous to chlorate of potash poisoning and paroxysmal hæmoglobinuria In blackwater fever the cause is probably the malarial toxin, in chlorate of potash poisoning it is sufficiently obvious, in paroxysmal hæmoglobinuria it is unknown, though it possibly is syphilitic in origin as suggested by Copeman [17] who says "A definite specific history has been forthcoming in all the cases that have come under my own observation" The three cases are, however, only analogous I do not for one moment suggest the identity of the causes of blackwater fever and paroxysmal hæmoglobinuria any more than I should of blackwater fever and chlorate of potash poisoning *The hæmoglobinuria is simply the natural* result of the preceding hæmoglobinæmia

One other fact certainly is of importance in blackwater fever, as in all other poisoning cases, and that is idiosyncrasy I believe that some persons get hæmoglobinuria with a much lower degree of malarial toxæmia than others Some of these patients may account for the slight and frequently recurrent cases which are reported Another factor may come in, and that is degenerative changes in the liver the result of malarial poisoning which impair its bile-forming functions It is clear that if the liver were to strike work the hæmoglobin would not be changed into bile pigment and that a hæmoglobinæmia, however slight, would cause hæmoglobinuria That such, however, is not the main cause is, I think, shown by the fact that there is much bile formed during blackwater fever, as shown by the profuse bilious vomiting and the not infrequent bilious diarrhœa While not wishing to claim that the above is any more than a possible theory as to the cause of blackwater fever, yet I would submit that it is possible, and, further, that it helps to emphasise what I believe to be undoubted facts—viz , that blackwater fever is of malarial origin and, further, that it is a special complication occurring in malarial cachectics and dependent on the destruction, by some means other than direct parasitic invasion of the red discs and the solution of the contained hæmoglobin in the plasma

TREATMENT

Having thus discussed the pathology of blackwater fever and shown what I hold to be its connexion with malaria I come to the practical question of its treatment In dealing with this it will be well to remind ourselves that three distinct factors are present There is, in the first place, the attack of malaria during which the hæmoglobinuric paroxysm develops Secondly, there is the chronic malarial toxæmia which has predisposed the patient to the attack Thirdly, there is the sudden loss of hæmoglobin which in its effect in no way differs from an ordinary severe hæmorrhage The above are present in all cases, sometimes there is another factor present in the subsequent nephritis It is clear that only the first of these—namely the malaria—would yield to quinine So far as is at present known, quinine has only a parasiticide and not an antitoxic function in malaria, and hence it cannot be relied upon for treatment of toxæmia and obviously not for the hæmorrhage Quinine, therefore, should be given in blackwater fever, but with the express object of clearing the blood of the malarial parasites and hence it should be given in full doses similar to those given in ordinary attacks of tropical malaria It must, however, be clearly understood that by the time a patient has reached the point of hæmoglobinuria his tissues are probably much degenerated and his vital functions seriously lowered, hence, though we may cure his malaria by quinine we must not be surprised should he succumb

A cachectic patient may be unable to withstand a severe hæmorrhage, when to this is added the constant and distressing vomiting which often involves starvation he is clearly liable to die from exhaustion, as many of the patients certainly do On the other hand, *this is a very different thing from saying that quinine is of no use in blackwater fever* I hold that it should be always administered in doses sufficient to make it certain that the blood is freed from parasites, just as the first step in the treatment of a patient suffering from sapræmia due to retained placenta is to clear out the uterus and so remove any danger of further infection

As previously mentioned in this paper, it is frequently difficult to efficiently administer quinine by the mouth on account of the persistent vomiting, and administration by the rectum is unsatisfactory I am myself a strong advocate for the hypodermic administration of quinine under these circumstances and in this practice I am supported by the profession in Italy and in America—though, as far as I know, many English medical men hesitate to adopt it The advantage of the hypodermic method is sufficiently obvious, for one can rest assured that the dose which we administer is actually absorbed The supposed difficulties are really hardly worth our consideration if we are thoroughly aseptic Sulphate of quinine is not suitable for hypodermic injection, perhaps the best salt is the acid hydrochlorate which is chiefly used in Italy it is soluble in its own weight of water The acid hydrobromate which is soluble 1 in 6 of water *may also* be used, especially if the patient is liable to cinchonism Personally, when in Africa I used the lactate which is soluble (according to Squire, seventeenth edition, 1899) 1 in 6 of water I am inclined to think that 10 grains of quinine administered hypodermically every eight hours on the first and second day of the disease and every 12 hours on the third day would be a sufficient dose, after this I suggest that five grains should be given twice a day till the end of the attack. I may

[17] Allbutt's System of Medicine vol. v, p. 627

mention that I always boil the solution of quinine and inject it while it is still quite warm When the drug cannot be administered hypodermically larger amounts may be necessary In a case of blackwater fever which I recently saw in England quinine was at first given by the mouth, the patient had a relapse It was then given hypodermically and the patient recovered without any further relapse [16] It is of course to be remembered that quinine will accumulate if the urine is either greatly reduced or suppressed and therefore it must not be continued in the same doses should this contingency occur

So much for the treatment of the malarial element; as regards the other two factors the main indications are to maintain free excretion with the view to liberating the body from the accumulated toxins and to procure rest and nutrition which will enable recovery to take place from the anæmia If the bowels are not opened a cholagogue purgative and enema should be given, but over purgation should be avoided I always myself administer sodium bicarbonate freely, this helps to allay vomiting and gastric pain and makes the patient more comfortable, and, I think, does good by its diuretic action and also helps to diminish the acidity of the urine Opium should be given without hesitation to procure rest Nutrition must be maintained by rectal feeding if necessary Strychnine and digitalis may be necessary in cases of extreme asthenia, they will act beneficially by helping to maintain the renal blood pressure and therefore the secretion of urine, for doubtless some of the cases of anuria occurring in blackwater fever are the result of collapse and not of nephritis If nephritis occurs the usual remedies are to be adopted, but caution should be used in the administration of such depressing drugs as pilocarpine, from the use of which I have certainly seen disastrous results, if it is decided to administer this drug not more than one-sixth of a grain should be given at one time After recovery the patient ought to be advised to take a holiday, if possible in England, and should not return at any rate until he has completely recovered from his anæmia and cachexia Indeed on general principles it is probably desirable that no one should return to Africa after an attack. This is particularly the case where the blackwater fever has developed in spite of precautions, but applies less to those cases where the attack can be traced to exceptional hardship and privations which are not likely to be repeated Those who, from one cause or another, cannot stand quinine and those who suffer from even slight albuminuria should not be selected for malarious climates Finally I urge that the prophylaxis of blackwater fever by habitual use of quinine will be found to be more hopeful than its treatment I have come to the definite conclusion that besides adopting precautions in regard to exposure to chills wet and to the sun, and as to moderation in food, alcohol, and sexual matters every resident in the more malarious parts of Africa should take at least five grains of quinine each day In the large majority of cases I believe that this would prevent the chronic malarial poisoning which is the predisposing cause of blackwater fever and would do much to eliminate this scourge from our colonies

Dover-street, Piccadilly W

[16] A. T Woolridge: A Case of Blackwater Fever complicated by Dysentery, THE LANCET March 18th 1899 p 762.

ROYAL NATIONAL PENSION FUND FOR NURSES — The annual meeting of this society was held on March 24th at 28 Finsbury pavement The deputy chairman, Sir Henry Burdett, K C B, presided, and in moving the adoption of the report reviewed the work of the past year which, he said, had been uneventful except for the steady increase in the number of new members The total invested funds had risen from £372 000 to £435 500 a net increase of over £63 000 exclusive of cash balances while the value of the securities held by the fund at the end of the year was considerably over the cost at which they stood on the books He concluded by stating that H R H the Princess of Wales, the President of the society had expressed her wish to present certificates to those nurses who had entered the fund since the last presentation at Marlborough House The date could not yet be fixed, but the policy holders would be communicated with as soon as anything definite was known

A CASE OF CEREBRO-SPINAL MENINGITIS TREATED BY LAMINECTOMY AND INCISION OF THE DURA MATER IN THE DORSAL REGION, DRAINAGE, RECOVERY; REMARKS

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AND

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A MAN, aged 24 years, was taken ill on Jan 4th, 1899, with pain in the legs which prevented his sleeping that night On the following day the pains were diffused all over the body and he experienced a dull, singing sensation in his ears which persisted till he became deaf He was admitted into St George's Hospital on Jan 6th and was then in a curious mental condition, his attention wandered and he was unable to reply pertinently to questions This was no doubt partly explained by his deafness The knee-jerks were normal. There was no muscular tenderness on pressure There was pain in the muscles of the back and legs but no other objective signs of disease He vomited twice in the evening and was delirious at night On Jan 7th the patient lay on his right side with his thighs and knees flexed, when disturbed he returned to this position. There was retraction of the head and rigidity of the muscles of the neck but no tenderness of the spine There was headache, but this was not localised and there was no tenderness on pressure He was drowsy during the early part of the day, but later in the afternoon he became restless and tried to get out of bed, at night he was delirious and a male attendant was required to control him He vomited twice in the evening The probability of his having cerebro-spinal meningitis was recognised and he was therefore examined with a view to determining whether any cause could be found There were no discharges from the ears or nose, no suppuration around the teeth or tonsils, no urethral discharge, and no history of any recent illness The lungs and heart were normal No enlargement of the spleen could be made out There was no herpes or petechial eruption The tache cérébrale was present Convergent strabismus occurred occasionally, but not constantly, the pupils varied being sometimes contracted and unequal and at other times dilated There was horizontal nystagmus Mr Grimsdale kindly examined the fundi oculorum and found that they were normal and on several subsequent occasions during the patient's illness he reported that there was no sign of optic neuritis On the 8th the patient's condition was worse, the rigidity spread to the muscles of the back, he screamed out, and his temperature, which had previously been normal, began to rise No knee jerks could be elicited Red patches appeared on the skin on the inner aspects of both knees and ankles and on the right elbow and were probably in part due to pressure and in part due to trophic changes The skin of the hands and feet was red and swollen, but not œdematous The headache and pain in the back and legs were worse and there was some giddiness There was divergent strabismus but no facial paralysis or paresis It is probable that the abnormal ocular movements were the result of spasm and not due to paresis He was delirious and violent again during the night On the 9th he was drowsy after a bad night The pupils did not react well to light The pulse had quickened to 124 The bowels had been constipated since his admission and only open after purgatives The urine had to be drawn off in the evening; there was never any incontinence of urine or fæces On the 10th he was alternately comatose and actively delirious His neck was more rigid and his general condition was worse He was regarded as having cerebro-spinal meningitis His hands were still red and somewhat swollen but not tender The skin had now become eroded on his

developed on the forehead, the inner side of the knees, and on the thighs There were no petechiæ on the skin So far the treatment had consisted in giving iodide of potassium, which possibly caused the rash, and in sedatives such as chloral and morphia, but as his condition was getting progressively worse and it seemed probable that he would die if left alone it was decided to ask for surgical assistance with the view of opening the dura mater of the lower part of the spinal cord and by establishing drainage to relieve the symptoms due to pressure Mr Allingham saw him in consultation and agreed to operate

An incision six inches long was made over the lower dorsal spines and laminectomy of the seventh and eighth dorsal vertebræ was performed When exposed the dura mater was seen to bulge It was incised for about an inch in the long axis of the cord Coagulated lymph and cerebro spinal fluid to the amount of about three ounces came out Some of the fluid, soaked up in cotton wool, and the lymph were examined by Dr Slater, bacteriologist to the hospital, but no diplococci were found A drainage-tube was inserted and no attempt was made to unite the incised margins of the dura mater The skin was loosely approximated by nine sutures and the usual antiseptic dressings were applied On Jan 11th the patient was decidedly better His neck was less rigid, the knee jerk was obtained on the left side but was absent on the right The hands were less flushed than before There was a free discharge of clear fluid from the wound necessitating its being dressed twice in the day

For the following three and a half weeks the discharge from the wound continued, but at intervals of two or three days the discharge became impeded by the healing of the wound and as a result of this obstruction the patient became ill, his temperature going up (*vide* chart) to 102° or 103° F, his head ached, and the muscles of the neck (which were at other times normal) became rigid All these symptoms disappeared when the wound was dressed and a free escape of fluid resulted These symptoms therefore appeared to be due to increased pressure exerted by the cerebro-spinal fluid on the brain and upper part of the cord The headache was partially relieved by antipyrin and phenacetin combined The liquid extract of ergot and tincture of belladonna were given with a view of diminishing the abnormal secretion of cerebro spinal fluid but this latter form of treatment seemed to be ineffectual As soon as it seemed safe he was propped up in bed so as to increase the drainage, a little later he was put into a chair in the afternoon but still the temperature rose at intervals in the later part of the day and the other symptoms presumably due to pressure of cerebro-spinal fluid recurred He was then got out of bed in the morning as well, and after this (the thirty-fourth day of the illness) his temperature remained normal, though the discharge diminished and finally disappeared On Feb 19th the tube was removed and the wound was completely healed on March 2nd During this period of interrupted convalescence he gradually improved Both the knee jerks were present on Feb 4th and no signs of any spastic condition developed His hearing slowly improved slightly but he is still very decidedly deaf Mr Bull kindly reported on the ears to the effect that there was no disease of the conducting apparatus of the ears Presumably it was due to inflammation spreading from the meninges along the auditory nerves towards the internal ear At no time was there any affection of his joints such as has sometimes been recorded in epidemic cerebro-spinal meningitis Thus in 111 cases elaborately reported on in Boston by Dr Councilman, Dr Mallory, and Dr Wright it occurred in six The patient can walk, but is naturally very weak and is in addition anæmic

Remarks —The lymph removed at the operation confirmed the diagnosis of cerebro-spinal meningitis and as no definite cause such as otitis, infective disease elsewhere, pneumonia, erysipelas, or infective endocarditis is forthcoming it appears probable from the symptoms, and perhaps especially from the deafness, that this was a sporadic case of epidemic cerebro-spinal meningitis The absolute proof of this is, however, wanting, since the diplococcus intracellularis was not found in the lymph removed at the operation The fluid should for purposes of bacteriological diagnosis have been removed by means of the needle of a hypodermic syringe before the dura mater was incised But apart from the fact that the material provided for bacteriological examination was not satisfactory it may be mentioned that the experience gained in the epidemic at Boston, U S.A, shows that the diplococcus intracellularis may be infrequent in the fluid and difficult to cultivate [1]

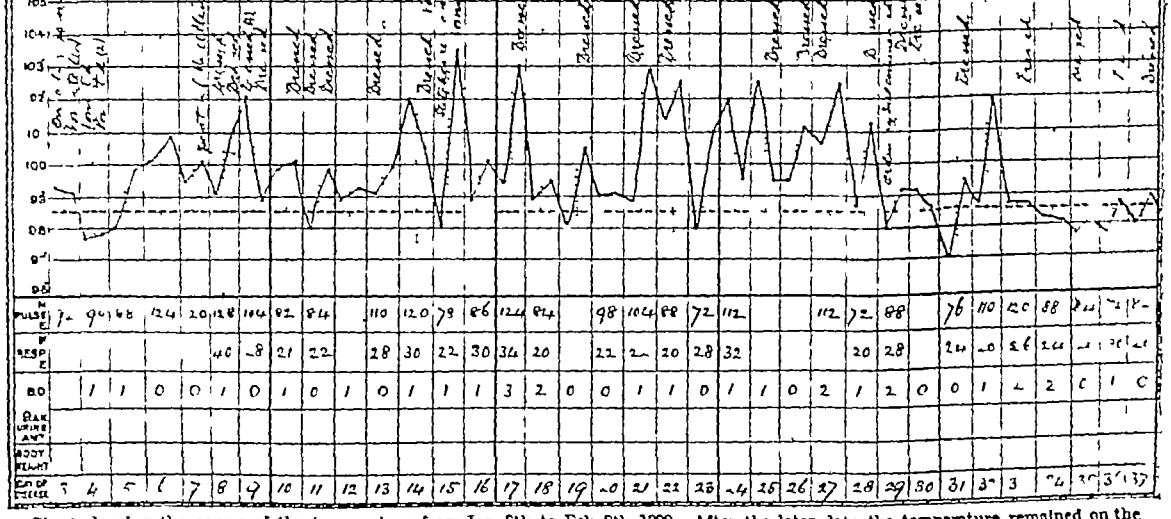

Chart showing the course of the temperature from Jan 6th to Feb 9th, 1899 After the later date the temperature remained on the normal line save a slight disturbance about the date of the removal of the tube—i.e., Feb 19th

With regard to the symptoms we do not propose to consider them seriatim but there are one or two to which attention may be directed There was no herpes but there was an eruption of a papular nature which was probably due to iodide of potassium, since there was no petechial character about it such as characterises the eruption of epidemic

[1] Report on Epidemic Cerebro-spinal Meningitis from the Boston City Hospital Pathological Laboratory 1898, p. 79

cerebro-spinal meningitis The hands became red and swollen and suggested a condition like erythromelalgia, which has also been observed in some spinal diseases, but there was no manifest tenderness on pressure That the trophic and vaso-motor influences were at any rate considerably impaired is shown by the readiness with which the exposed skin of the hands became red from vaso-motor paralysis, and by the facts that pressure led to similar changes on the knees and ankles and friction to destruction of the skin over the right elbow Optic neuritis was absent Inasmuch as the auditory nerves are very frequently affected it might have been expected that optic neuritis would be frequent, this however, appears hardly to be the case, for Randolph[2] only found it in six out of 40 cases It is interesting to note that in the somewhat similar though chronic affection, the non tuberculous posterior meningitis of infants, optic neuritis is, according to Dr Lees, very rare[3]

The chief interest attaches to the treatment As has been seen no good resulted from iodide of potassium and the man appeared to be likely to die As a last chance it was thought justifiable to open the dura mater of the cord and drain the subdural space The question now arises as to whether this was, after all absolutely necessary, for the case was not one of the fulminating class in which death occurs within 48 hours of the onset, but corresponds to Osler's[4] ordinary type. There is however, no doubt that the patient did improve considerably after the operation and it does not as yet appear that he has suffered in any way from the operation

As far as we can find out the spinal dura mater has not been freely opened before in acute cerebro spinal meningitis This procedure is however only carrying further what has already been done—viz lumbar puncture—while in cases of chronic non tuberculous posterior meningitis in infants Mr Ballance[5] has trephined the occipital bone and drained the posterior sub-arachnoid cistern This method of treatment has therefore been already applied to the posterior fossa of the skull in a disease which is very closely allied indeed to epidemic cerebro-spinal meningitis, for Still[6] comes to the conclusion that the micro-organism of simple posterior basic meningitis of infants is almost identical with the diplococcus intracellularis of epidemic cerebro-spinal meningitis

Lumbar puncture has often been employed for purposes of diagnosis Thus in the 111 cases of the Boston epidemic it was employed 55 times and no bad results were ever seen, indeed, in one case the patient seemed to be relieved by it and to be quieter and to sleep better In a valuable digest on "Lumbar Puncture of the Spinal Meninges as a Diagnostic and Therapeutic Measure" Mr Alexander Miles quotes a case of epidemic cerebro-spinal meningitis in which von Leyden[8] performed lumbar puncture three times, the first time the fluid contained diplococci, a few days later the fluid withdrawn contained fewer, and on the third occasion none The patient recovered The evidence derived from Lenhartz's[9] experience is conflicting, in two patients no fluid was obtained by lumbar puncture and recovery followed, while three others where fluid containing diplococci was withdrawn proved fatal In our case laminectomy was performed in the dorsal region rather than in the lumbar inasmuch as the operation is easier from the facts that the laminæ are narrower and more easily divided and the muscles are not so thick as in the lumbar region

As compared with lumbar puncture laminectomy and incising the spinal dura mater is of course a rather more formidable proceeding, but, on the other hand, it gives exit to a much larger quantity of fluid and is a more radical method of treatment inasmuch as it establishes a satisfactory drainage, and it may be added that in an experience of some twelve laminectomies the surgical writer of this paper has never observed any untoward results

The operation itself was successful but the discharge in our case of cerebro-spinal fluid once established it seemed doubtful whether the wound could ever be closed with safety For when the outlet became temporarily occluded the patient suffered from headache, fever, and cervical opisthotonos These symptoms certainly resemble the intermittent type of epidemic cerebro-spinal meningitis, if they were the manifestations of that condition the satisfactory result of the case could be explained by regarding this as the natural termination of this form of the disease On the other hand, they seemed to depend so closely on an intermission of the discharge of cerebro-spinal fluid and to be so entirely relieved when the flow was established that it is difficult to dissociate them Assuming that the symptoms were due to the pressure of pent-up cerebro-spinal fluid it appeared that though the patient might remain fairly comfortable as long as the drainage was kept up there was yet some risk that if he was left with a permanent fistula secondary infection of the spinal membrane might occur and lead to very grave results It seemed as if the cerebro-spinal fluid was secreted in larger quantities and that the choroid plexuses having once started on this abnormal functional activity might continue to do so Dr StClair Thomson's[10] valuable researches, though then unpublished, on a continuous discharge of cerebro-spinal fluid from the nose were, it should be stated, fully known to us and led us to fear that a similar state of things might develop in our patient While if the exit of fluid was interfered with mechanically there were two alternatives (1) that the secreting choroid plexuses might feel the effect of increased pressure and return to their ordinary state of function, and that thus after a short time the intracranial and intraspinal pressure might become normal, or (2) that as in some cases of spina bifida which have been radically cured by operation hydrocephalus might result Hydrocephalus is also known to be a sequel of epidemic cerebro-spinal meningitis We hope that the first alternative has taken place

Occasionally after recovery from epidemic cerebro spinal meningitis a spastic condition of the legs develops, there is no sign of this in our patient and further there is no evidence of any harm having resulted from the opening of the spinal meninges There is nothing to suggest any local pachymeningitis or cicatricial contraction of the meninges around the cord, or that any transverse meningo-myelitis is in progress

In conclusion, the chief points of interest are (1) the good effects of free drainage in relieving increased tension in the subdural space in cerebro-spinal meningitis, and (2) that while this is more perfectly effected by laminectomy and incising the dura mater than by the slighter operation of repeated lumbar puncture, there appears to be some danger lest this free drainage may establish an excessive secretion of cerebro-spinal fluid analogous to that which Dr StClair Thomson has shown to occur when the cerebro-spinal fluid leaks through the floor of the anterior fossa into the nose

We are indebted to Dr J Howell Evans house physician and Mr A T Spanton, clinical clerk, for their careful notes

[2] Quoted by Ormerod, Allbutt's System of Medicine vol. i., p. 666
[3] Lees: Brit Med Jour vol. i. 1897 p. 1092.
[4] Osler: Principles and Practice of Medicine, third edition p 107
[5] Ballance: Brit. Med Jour vol. i., 1897 p. 1092.
[6] Still Transactions of the Pathological Society vol. xlv., 1898, p. 227
[7] Loc. cit., p. 51
[8] Leyden La Semaine Médicale July 1896.
[9] Lenhartz La Semaine Médicale April 1896 quoted by Miles the Scottish Medical and Surgical Journal vol. i., 1897 p. 1 6

THE COMPLICATIONS OF THE SERUM TREATMENT OF DIPHTHERIA

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THE value of the serum treatment of diphtheria being now thoroughly established, its complications which are fairly constant become somewhat important During the past few months I have collected at the Homerton Fever Hospital 100 cases which I have personally examined each day and on these cases my paper is based These complications are the following rashes, pains in and around the joints, fever, transient albuminuria, abscess, bruising and sloughing at the seat of injection, and certain constitutional disturbances

Broncho pneumonia, nephritis, and other inflammations, and also sudden death following the injection of antitoxin serum have been recorded, but nothing of this kind has occurred in the London hospitals where several thousand injections are given annually The blood serum is responsible for causing the rashes, the pains and the fever as these occur whether the horse from which the serum is taken be immunised or not Different horses produce

[1] Proceedings of the Royal Society February 1899

different effects with regard to the prevalence of pains and the proportion of the varieties of rash, and hence the percentage of these varies constantly The effect of dose on the frequency of the rashes is very little if anything I have calculated out the average dose of all the patients treated at the Homerton Fever Hospital from January to June, 1898, neglecting those who died before the rash had time to appear, and find that of those who developed a rash it was 6223·5 units and of those who had no rash it was 5332 1 units During the same period 166 patients had multiple injections and of these 90 had a rash and 76 had no rash, and 351 patients had each one injection and only 156 had a rash and 195 had no rash. Hence it is probable that large and also multiple doses increase the frequency of the rashes to a slight extent Adults are more liable to severe pains than children The severity of the attack of diphtheria and the day of the disease on which the antitoxin is administered have no influence on the frequency of rashes and pains For the year 1898 the percentages at the Homerton Fever Hospital were rashes, 43 2 per cent , pains, 7 4 per cent , fever albbe, 3 6 per cent , and abscess, 1 3 per cent

RASHES

There are two varieties of rashes, urticarial and erythematous, and these may occur alone or be combined in endless variety Of the 100 cases 25 were urticarial, 31 were erythematous, and 44 were combined, and of the latter 26 were mixed and 18 were successive, the rashes following one another immediately or after an interval of from one to five days, either urticaria or erythema coming first There may be more than two rashes of the same or different variety following one another The time of appearance of these rashes varies from the second to the eighteenth day after injection, exceptional cases occurring at earlier or later periods, but the vast majority occurring from the seventh to the ninth day after injection The dose does not affect the severity or time of appearance of the rash, doses of 4000 units, 8000 units 12,000 units, 20 000 units and 24 000 units may all cause a rash on the eighth day, 4000 units may cause it on the second day or 8000 units on the eighteenth day Multiple doses given at intervals of a day do not affect the time of the appearance of the rash, but if a patient has had antitoxin administered a month or two previously the rash which is caused by a subsequent injection comes out very early, in some cases from 20 to 30 minutes after the injection The rashes last for two or three days as a rule, they often last for a week and sometimes for 16 days

Urticarial rash —The wheals occur in groups and vary in size from a papule to a patch of half the size of an adult hand They disappear quickly and leave patches of simple erythema and they are replaced by fresh ones A wheal may come and go in half an hour and successive crops may come out at intervals of from one to four days Itching is present and there may be urticaria factitia The distribution is usually general The favourite places on the trunk are the seat of injection, the shoulders and the buttocks Both the flexor and the extensor surfaces of the limbs are involved, but the latter more frequently than the former, and patches tend to collect round the joints The neck, the cheeks, and the eyelids are commonly affected The rash frequently begins at the seat of injection and may remain limited to this area and in a few cases the limbs alone are affected Œdema of the cellular tissues often accompanies the urticarial eruption The eyelids, the base of the nose, the cheeks, the lips, the scrotum, the prepuce, the labia majora, and the dorsum of the feet and the hands are the parts commonly affected, sometimes the whole of a limb is swollen or in rare cases the whole of the body The œdema lasts from one to four days and may be accompanied by enlargement of the lymphatic glands

Erythematous rashes —Of these there are four types (1) resembling erythema multiforme either clearing up in the form of rings or not and sometimes becoming hæmorrhagic, (2) simple erythema in patches, (3) scarlatiniform, resembling scarlet fever, and (4) morbilliform resembling measles

1. The first variety consists of maculæ, which may or may not be raised and which vary in size from that of a papule to about that of a shilling Large patches are formed by fusion, which may involve the entire circumference of a limb, or the maculæ may be chiefly discrete and on the trunk especially they tend to be small, frequently giving rise to a very coarsely punctate appearance The fusion into patches is especially marked on the extensor surfaces of the joints and sometimes the skin desquamates in this situation and gives rise to the appearance of psoriasis The maculæ are bright red or almost purple in colour and are sharply defined, the intervening skin being normal Occasionally a few tiny vesicles may be seen on their surface If the maculæ and patches clear up in the form of rings the latter may join together, forming gyrate figures, or they may be small and more or less discrete On the trunk and opposite the joints huge rings may be formed and on the trunk a large ring may sometimes be seen having its periphery formed of tiny macules more or less fused with free macules dotted round its circumference and the centre fawn coloured and slightly desquamating In a few cases the rash becomes hæmorrhagic and a mottled pigmentation is left for a few days There may be a little desquamation and sometimes there is itching The distribution of the rash is more definite than in the urticarial variety On the limbs it is much more common on the extensor than on the flexor surfaces and it is also more profuse on the extensor aspect, especially round the joints where large patches or rings are very frequent with small macules extending up and down the limb The rash occurs scattered over the front and back of the trunk, forming large patches at the seat of injection (in the loin) and on the buttocks It may be present on any part of the face and sometimes behind the ears It may commence on the limbs, but very frequently at the seat of injection, and its distribution is usually general although it may be limited to the limbs or the seat or seats of injection

2 The simple erythema consists of non raised, ill defined, bright red patches of irregular shape producing a blotchy appearance It is most frequently the result of wheals, but it undoubtedly may occur independent of them It occurs commonly at the seat of injection where it sometimes extends from the loin on the back and the abdomen as a punctate erythema It forms patches on the cheeks and on any part of the trunk and limbs These erythematous patches are very fugitive and it is often very difficult to say whether they are or are not the result of wheals In some instances, as on the buttocks, they are due to pressure There is no desquamation

3 The scarlatiniform rash occurs very early and when the patient has had a previous injection some time before In one case the patient had had antitoxin administered five months previously and the rash came out on the day following the injection of 4000 units, this rash lasted for one day and was replaced by an urticarial eruption lasting for four days, a macular rash then appeared for two days and finally a crop of wheals for one day The rash is a scarlet punctate erythema, thickest round the seat of injection, where it forms a bright red flush It is often thicker on the extensor than on the flexor surfaces of the limbs and frequently clear patches of skin are visible It may occur in patches only, chiefly on the trunk, and is then combined with other rashes When general it may be distinguished from scarlet fever by the usual absence of vomiting, the rapid disappearance of the rash, and the occasional patches of clear skin It may also be accompanied by other rashes, desquamation does not usually occur and the rise of temperature may be slight

4 The morbilliform rash is more frequent than the scarlatiniform and is commonly preceded by an urticarial eruption, but it may occur alone This rash is a macular erythema like measles, but it may begin on any part of the body and especially on the limbs, where it is more profuse than on the trunk and face It is thickest on the extensor surfaces of the limbs, forming patches round the joints, and may be seen behind the ears Patches of clear skin may be seen and there may be ring formation during the disappearance of the rash, which as a rule leaves no desquamation There is conjunctivitis and frequently swelling of the lids, but sneezing and cough are as a rule absent The rash lasts from three to four days and there are commonly pains in the limbs Fever may be absent but as a rule the temperature suddenly runs up to about 103°F when the rash appears and falls either just before or when it disappears Six out of the 100 cases were of this variety Four appeared on the fourteenth day after injection (the incubation period of measles being on the average about 10 days) and had doses respectively of four, 12, 16, and 24,000 units The remaining two appeared on the twelfth and

fifteenth days and each had a dose of 12 000 units Five were preceded by an urticarial eruption and one by urticaria and macular erythema combined at the seat of injection. It is interesting to note that the scarlatiniform rash comes out much earlier than the morbilliform variety and that the incubation period of scarlet fever is from two to four days as compared with that of measles which is 10 days By attention to the above points these two important rashes can generally be diagnosed from scarlet fever and measles respectively

PAINS

The joints and surrounding tendinous and muscular structures are affected and there may be a little swelling of the joint, but it is quite the exception to find much fluid in the joint and the skin over it is usually normal In some cases the pains and temperature simulate acute rheumatism The pains shoot about and shift from joint to joint and there is also constant aching and intense pain on movement There may be headache and furred tongue and sodium salicylate produces no relief This condition lasts for three or four days and in one case it lasted for nine days. In other cases there may be simply a little aching in one or two of the joints which lasts for a day or two When the pains have gone stiffness on moving the limbs is complained of The joints most commonly affected are the knees, the remaining joints of the limbs being affected about equally. The hips, the knees, the wrists, and the hands are more commonly affected alone than any other joints The vertebral column is also frequently affected and stiffness and pain in the neck and the back are complained of There is commonly pain in the temporo-maxillary joint on opening the mouth and less frequently in the sterno-clavicular articulation. There is sometimes pain down the inner side of the thighs in the popliteal space, and in the muscles of the calf The pains occur with all forms of rash and the temperature in these cases is usually coincident with the pain, except in the morbilliform cases, when the temperature is coincident with the rash There may be a thick rash and shooting pains without any rise of temperature at all The rash is frequently more profuse around the affected joints and it may begin in one limb which is first affected by pain The rash usually appears first and the pain may occur at any time during the course of the rash or exceptionally after it has disappeared Less frequently the pain may begin and the rash appear in a day or two The rash may start at the seat of injection and when the limbs are attacked the pains appear

FEVER

A rise of temperature occurs most frequently with rash and pain, next with rash alone, and rarely with pain alone. On referring to old notes of cases rises of temperature are found at periods corresponding to those of the appearance of the rashes without anything to be noted to account for them, but personally I have not observed a case of fever alone without either enlarged glands, otitis media, or some other cause Fever occurs about equally with all forms of rash and when associated with both rash and pain is almost always coincident with the pain except in the morbilliform cases When associated with rash alone it generally appears with the rash and may last throughout or disappear in a day or two The rash may appear first and sometimes the temperature only rises during the latter half of the period of the rash In some cases the rise of temperature may precede the appearance of the rash The course of the temperature curve is irregular and its height may be anything between 100° and 105°, being especially high when associated with pain or in the morbilliform cases Of the 100 cases 26 had fever associated with rash and pain, 17 had fever with rash alone, 46 had rash alone, and 11 had rash associated with pain

ALBUMINURIA.

Of the 100 cases 54 had albumin in the urine; and of these in 25 it was present before the rash appeared This leaves 29 cases in which there was albuminuria during the course of the rash In 24 of these cases there was a trace of albumin only and it lasted from one to three days, and in two cases for six days, disappearing before the rash had gone. In the remaining five cases the albumin was present in considerable quantity and outlasted the rash in three cases, disappearing with it in two cases Neglecting these five cases there remain 24 cases in which a trace of albumin appeared in the urine after the rash had come out and disappeared before the rash 11 of these cases had more or less fever at the time, hence there are left 13 cases out of the 100 with nothing to account for the albuminuria except that it was coincident with the rash. It may be argued that this albuminuria was a result of the disease itself, but on referring to the report for 1896 of the Metropolitan Asylums Board I find that the percentage of albuminuria for that year when antitoxin was used was 53 4 as compared with 24 1 in the year 1894 when no antitoxin was used During the year 1896 every case of albuminuria, however slight, was included, but in 1894 at some of the Board's hospitals these slight cases were neglected hence the percentage 24 1 is probably not high enough However, under any circumstances there must have been a considerable difference in the two percentages, and I take this as an evidence in favour of the fact that the 13 cases I have mentioned above were the result of the serum The amount of albumin was so slight and it lasted for so short a time that no possible harm could have resulted to the kidneys

ABSCESS

Abscess at the seat of injection is no doubt due to infection through the needle and is usually found in septic cases and in those complicated with scarlet fever It is recognised in a few days as a tender, deep localised swelling, the skin over it being normal It readily heals up on being incised.

BRUISING

This occurred round the seat of injection eight times in the 100 cases It may be at first of the size of a shilling and increase very little, or it may spread to the size of the palm of the hand It appears in from one to four days after the injection, and lasts from four to seven days In three cases the bruising was surrounded by a zone of small macules, in one of these the erythema came out with the bruise on the day after injection and disappeared on the following day, leaving the bruise In the other two cases the bruising came out on the third day after injection and the erythema two days subsequently, the latter became haemorrhagic, lasting for seven days

SLOUGHING

As far as I am aware there is only one case of sloughing on record The patient was one year and 10 months of age certified as diphtheria, 6000 units of antitoxin being injected On the next day the case was found to be scarlet fever 18 days afterwards the patient developed laryngeal diphtheria and 8000 units were injected into the left loin. Half an hour after this latter injection there was a general eruption of wheals and on the following day a bruise appeared at the seat of injection which was surrounded by a red flush Bullæ then formed upon the affected skin which subsequently sloughed over a considerable area, the underlying muscles being exposed The child who was seriously ill with scarlet fever and diphtheria died at the end of 15 days

CONSTITUTIONAL DISTURBANCE

Three cases of this description occurring soon after the injection are published in the appendix to the report of the Antitoxin Committee of the Clinical Society of London. In each case the patient had had previous injections and each recovered They all occurred during the year 1897 at the Homerton Fever Hospital and were female children aged respectively four years, six years, and three years The first patient (35 days previously) had 12,000 units injected in three doses 20 minutes after an injection of 4000 units the patient had a rigor and convulsions with a temperature of 105° F When this passed off the child vomited several times and on the following day there was a mixed urticarial and erythematous rash The second patient had 4000 units 37 days previously and 30 minutes after the injection of 4000 units had a rigor and became quite collapsed with a temperature of 105° On the following day a mixed erythema and urticaria appeared at the seat of injection The third patient had been given 14 000 units 47 days previously and 15 minutes after 4000 units had been injected the patient vomited and was covered with a general urticarial eruption Two hours later she had a rigor with collapse and six days later still a macular erythema appeared

In conclusion one may say that the complications of antitoxin are at times very painful and inconvenient but quite harmless, the only exception being the case in which sloughing occurred, and in that case the child was in an exceedingly bad condition as the result of scarlet fever and diphtheria combined when the antitoxin was administered.

Homerton, N B.

ON CERTAIN VARIATIONS IN THE MOTOR PHENOMENA OF CHOREA [1]

BY JAMES W RUSSELL, M A., M D CANTAB, M R C P LOND,
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[*Preliminary note*—After I had obtained nearly all the autographs which are here reproduced and had formed my deductions from them my attention was called to a paper published by Dr Weir Mitchell and Dr Wallace Rhein in the *Philadelphia Medical Journal* of Jan 22nd, 1898, in which they divided cases of chorea into certain groups according to the character of the handwriting These groups correspond mainly, though not entirely, with those into which I have independently arranged my own cases I should, of course, have refrained from publishing this paper were it not that my own investigation was conducted without any knowledge of the work of Dr Mitchell and Dr Rhein and that the latter, as far as I can ascertain, has passed unnoticed in this country A study of the literature of the subject will be found in the paper referred to, and this is so complete that it is unnecessary for me to go further into the matter]

It is generally believed that the motor phenomena of chorea are of a very uniform character, especially as regards the effect thereon of attempted voluntary movements It is true that certain writers make reference to the possession by some patients of the power of controlling to some extent the typical movements of the disease and that a few even speak of the existence of an incoördination which may occasionally be out of proportion to the severity of the movements themselves Nevertheless most writers on chorea are in agreement with Professor Henoch when he sums up the matter by saying that "under all circumstances any purposive movement tends to make the chorea worse, any attempt to write, to take hold of small articles, to raise the arms above the head, to causes the choreic movements to increase considerably"

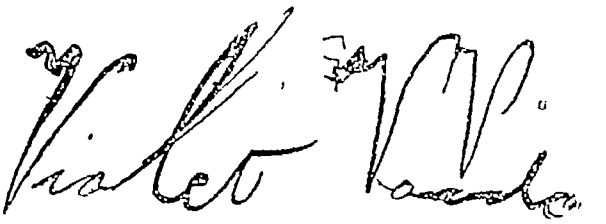
My attention was accidentally called to the incorrectness of such statements Having for some time wished to find some means of registering the severity and progress of my cases of chorea in order to investigate the efficiency of drug treatment it occurred to me that the handwriting of my patients might afford the means of which I was in search I therefore began to take specimens of writing from all my choreic patients, with the result that in a very short time I realised that there existed very unexpected variations in the power of writing and that these variations in many cases held no relation whatever to the violence of the choreic movements The writing was therefore useless for my purpose and I have continued the study of the writing for its own sake In my cases—all of which, with one exception, have been met with in my out-patient practice—I have recognised the existence of five groups, separated from one another by differences in the manner in which they reacted to the *demand to perform delicate coördinated acts*, and of each of these groups I have reproduced the most typical of the autographs

1 The first group contains those cases which accord with the descriptions usually given—that is, in which the interference with voluntary action corresponds with and directly proceeds from the typical choreic movements It is hardly necessary to say that in the slight cases little or no disturbance is to be traced, whilst all degrees are met with between these and cases in which the interference is of the most marked description Of this group I present four specimens (Figs 1, 2, 3, and 4)

The late Dr Sturges gave in his monograph on Chorea an excellent description of what happens when a choreic patient belonging to this group attempts to write He says "When a choreic child improves sufficiently to maintain some feeble and precarious grasp the first attempt at writing some easy word begins with much purposeless flourishing of the pen point over the place until at length it hits the paper and shapes a letter or two Then follow further superfluous hoverings in the air when again the pen alights and more is added So the task progresses by snatches and what the written word signifies is a number of detached motor acts, now more now less feeble, the intervals being surrendered to mere riot" In watching this process in the cases with which I am now dealing it has always seemed to me that the ability to write at all depends ultimately on the power of more or less inhibiting the movements for a short time If no such power exists at all the child will rarely be induced to make the attempt, though in the out-patient room, at any rate, such cases are seldom met with When, however, there is enough control to render some attempt possible the performance is a very striking one The preliminary flourishing of the pen which Dr Sturges describes ends in an obvious effort whereby the choreic movements are for a moment inhibited, and during the pause thus brought about one or two letters, or part of a letter, are written The difficulty however, becomes steadily greater as the act progresses and the last stroke of the pen before the outbreak occurs is generally traced slowly and with special effort Then at last a sudden end comes to the power of control and as though by an irresistible urgent command a period of wild and greatly increased movement is perforce indulged in Again the movements subside a little, inhibition becomes again possible, and another effort is made with results as before Hence it is that the individual lines of even the bad examples of handwriting rarely show a degree of irregularity such as would naturally be expected

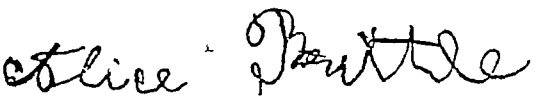
Figs 1, 2, and 3 show the results produced according as the period of inhibition is longer or shorter Thus, in the case of Violet Woodhall (Fig 1) the control was

FIG 1



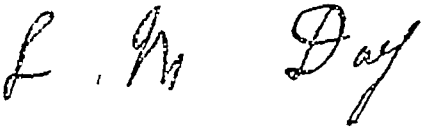
very imperfect and fleeting, and frequently did not extend through the time necessary for the completion of even a single letter Hence the writing is greatly interfered with and the excursions of the pen are large In the case of Alice Brittle (Fig 2) the inhibition lasted longer and there

FIG 2



was often time for the continuous tracing of one or two letters, but between these the movements were very pronounced Louisa Day (Fig 3), on the other hand, was able to keep her movements more or less in check whilst she wrote the whole of her surname, hence the writing

FIG 3

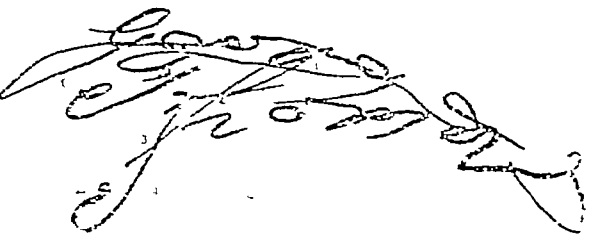


itself is fairly good and it is the intervals between the initials which represent the periods of movement Another effect of the irresistible necessity for movement which the child knows will shortly make itself felt is seen in some cases in the attempt to get through as much as possible of the *proposed task* before the outbreak occurs This is seen in the writing of George Thomas (Fig 4) whose autograph was written at great speed and with much flourishing of the pen in the interval between the two names Finally, it may just be mentioned that in the mildest cases of chorea no defect of writing is seen beyond a marked thickening of the down strokes of the letters This is due to the tendency to maintain an unduly

[1] A paper read before the Birmingham and Midland Counties Branch of the British Medical Association on June 12th, 1899

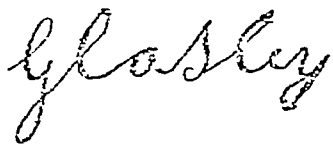
rigid grasp of the pen and is, as I suppose, the expression of the effort made even in these cases to control the slight choreic movements

FIG 4



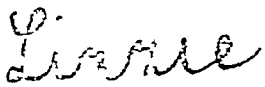
2 The second group consists of cases in which a more or less complete control over the movements can be exercised even though they be of considerable severity Of this group I present three specimens (Figs 5, 6, and 7) These autographs were all executed by children who were suffering from a severe attack of chorea, yet none of them show any material disorder of writing Indeed, they are on the whole good specimens considering that they come from young children belonging to the uneducated classes The first case (Fig 5) was one in which there was ceaseless choreic move

FIG 5



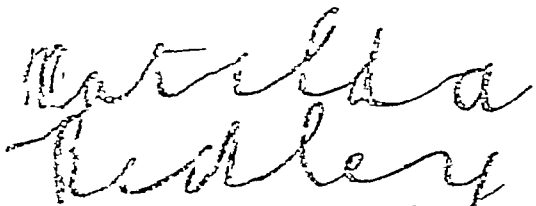
ment of the arms and legs Yet on writing the pen was held with perfect steadiness and with the exception of an occasional stop in the process it was in all respects normal The second case (Fig 6) was one of well marked right-sided

FIG 6



chorea, though of somewhat less severity than the former and the writing is certainly good for a child only eight years of age The remaining case (Fig 7) was of greater severity than either of the two preceding cases and, indeed, needed

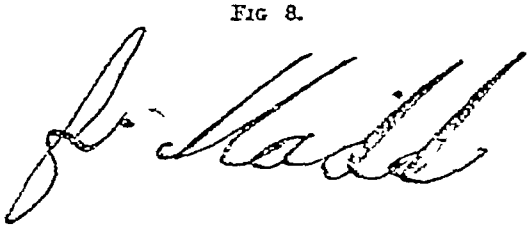
FIG 7



admission into the hospital. Yet, although the right side was especially affected and the movements were of great extent and wildness, almost perfect control was exercised during the act of writing A specimen of the writing obtained after recovery showed no very great difference from that presented here

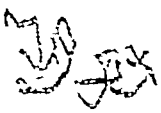
3 The third group contains cases in which, although there is apparently no chorea—or but the slightest—of the right side, yet the act of writing is greatly interfered with Three examples of this group are shown (Fig 8 9 and 10) The case of Fanny Maddox (Fig 8) was one of apparently pure left-sided chorea The right hand showed no choreic movement and the hand and arm were held horizontally out with perfect steadiness Yet the attempt to write resulted in great disorder and on two occasions was given up as impossible before the completion of the name. Florence S——

FIG 8.



(Fig 9) was suffering from considerable chorea of the left side and but the slightest on the right On holding the hands and arms horizontally out the left fingers were hyper extended and subject to constant irregular movements, but on the right side

FIG 9.



there was no trace of either defect. Yet, again, the attempt to write produced such extreme disturbance as to render the act practically impossible Finally, Samuel Nash (Fig 10), an intelligent boy, aged 12 years, showed nothing beyond an

FIG 10

occasional twitch of one or the other finger, but the attempt to write produced marked disorder of movement. The pen was held clumsily and although the hand was steady the movements of the fingers were ill judged and the letters were ill written and irregular His ordinary writing was said to be good.

It has appeared to me that in these cases the disorder has arisen from an inability to bring into coördination with one another the fine movements involved in writing Not only were there practically no choreic movements during rest, but none were developed by the act of writing I should add that I cannot be quite sure that this was entirely true of the case of Florence S—— (Fig 9) This case was one of the earliest met with and both my notes and recollection are a little imperfect Moreover, the writing suggests the possibility that some true choreic movements may have been developed and I do not feel myself justified in stating positively that this was not the case The above description, however, is entirely accurate of the two other cases, as of several others of which I have not reproduced the writing

The slightest tendency towards incoördination is frequently seen in an inability to combine the onward movement of the hand with the movement of the fingers When this is the case the hand remains in the same spot on the paper, whilst the fingers become more and more crowded together until at last a pause has to be made whilst a new position is taken up The result is a characteristically cramped handwriting which is often seen in mild cases of chorea

4 The best demonstration of the existence of a disorder altogether different from and independent of the choreic movements is seen in the fourth group of cases of which I have only come across a single example It resembles the second group in the complete control which can be exercised over the movements, but, unlike that group a marked defect of writing remains behind Fig 11 represents the attempt of a child named Bertha Kendall to write her name The case was a very bad one and I hardly thought it worth while to ask her to try to write, feeling sure that even the attempt would be beyond her power To my surprise, however on taking hold of the pen her right hand became perfectly steady nevertheless the writing was quite unintelligible This failure again seemed to be due almost

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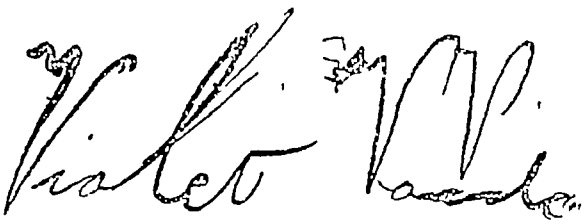
My attention was accidentally called to the incorrectness of such statements Having for some time wished to find some means of registering the severity and progress of my cases of chorea in order to investigate the efficiency of drug treatment it occurred to me that the handwriting of my patients might afford the means of which I was in search I therefore began to take specimens of writing from all my choreic patients, with the result that in a very short time I realised that there existed very unexpected variations in the power of writing and that these variations in many cases held no relation whatever to the violence of the choreic movements The writing was therefore useless for my purpose and I have continued the study of the writing for its own sake In my cases—all of which, with one exception, have been met with in my out-patient practice—I have recognised the existence of five groups, separated from one another by differences in the manner in which they reacted to the demand to perform delicate coordinated acts, and of each of those groups I have reproduced the most typical of the autographs

1 The first group contains those cases which accord with the descriptions usually given—that is, in which the inter ference with voluntary action corresponds with and directly proceeds from the typical choreic movements It is hardly necessary to say that in the slight cases little or no dis turbance is to be traced, whilst all degrees are met with between these and cases in which the interference is of the most marked description Of this group I present four specimens (Figs 1, 2, 3, and 4)

The late Dr Sturges gave in his monograph on Chorea an excellent description of what happens when a choreic patient belonging to this group attempts to write He says "When a choreic child improves sufficiently to maintain some feeble and precarious grasp the first attempt at writing some easy word begins with much purposeless flourishing of the pen point over the place until at length it hits the paper and shapes a letter or two Then follow further superfluous hoverings in the air, when again the pen alights and more is added So the task progresses by snatches and what the written word signifies is a number of detached motor acts, now more now less feeble, the intervals being surrendered to mere riot" In watching this process in the cases with which I am now dealing it has always seemed to me that the ability to write at all depends ultimately on the power of more or less inhibiting the movements for a short time If no such power exists at all the child will rarely be induced to make the attempt, though in the out-patient room, at any rate, such cases are seldom met with When, however, there is enough control to render some attempt possible the per formance is a very striking one The preliminary flourishing of the pen which Dr Sturges describes ends in an obvious effort whereby the choreic movements are for a moment inhibited, and during the pause thus brought about one or two letters, or part of a letter, are written The difficulty however, becomes steadily greater as the act progresses and the last stroke of the pen before the outbreak occurs is generally traced slowly and with special effort Then at last a sudden end comes to the power of control and as though by an irresistible urgent command a period of wild and greatly increased movement is perforce indulged in Again the movements subside a little, inhibition becomes again possible, and another effort is made with results as before Hence it is that the individual lines of even the bad examples of handwriting rarely show a degree of irregularity such as would naturally be expected

Figs 1, 2, and 3 show the results produced according as the period of inhibition is longer or shorter Thus, in the case of Violet Woodhall (Fig 1) the control was

FIG 1

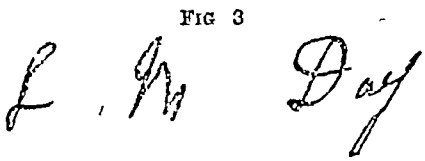


very imperfect and fleeting, and frequently did not extend through the time necessary for the completion of even a single letter Hence the writing is greatly interfered with and the excursions of the pen are large In the case of Alice Brittle (Fig 2) the inhibition lasted longer and there

FIG 2

was often time for the continuous tracing of one or two letters, but between these the movements were very pronounced Louisa Day (Fig 3), on the other hand, was able to keep her movements more or less in check whilst she wrote the whole of her surname, hence the writing

FIG 3



itself is fairly good and it is the intervals between the initials which represent the periods of movement Another effect of the irresistible necessity for move ment which the child knows will shortly make itself felt is seen in some cases in the attempt to get through as much as possible of the proposed task before the outbreak occurs This is seen in the writing of George Thomas (Fig 4) whose autograph was written at great speed and with much flourishing of the pen in the interval between the two names Finally, it may just be mentioned that in the mildest cases of chorea no defect of writing is seen beyond a marked thickening of the down strokes of the letters This is due to the tendency to maintain an unduly

[1] A paper read before the Birmingham and Midland Counties Branch of the British Medical Association on June 12th, 1899.

like our teaspoon strainer, only with a hole running along the length of the handle Through this long strainer he sucks the beverage as he carries his teapot about with him, and he sucks and fills all the day long and without either sugar or cream This strainer is called a bombilla, although the name is often given to combined gourd and strainer

Personal experience —Before detailing my experience I may say that I have asked my dyspeptic patients to try the maté, but they have all declared themselves unable to over come the peculiar flavour and have preferred the dyspepsia to the maté My reason for trying the maté was for the purpose of benefiting my patients We are all now and then driven from pillar to post to find the smallest novelty for those nervous creatures whom every practitioner in time collects around him I began myself by infusing for five minutes one teaspoonful of powdered maté in a breakfast-cup of boiling water This was taken hot with sugar and cream, sometimes immediately before and sometimes immediately after dinner The flavour was far from pleasant, nevertheless I gulped the fluid down For the first three days there was nothing to note except the ever present sensation of maté flavour and I did not feel inclined for my usual amount of China tea and tobacco On the fourth day, one and a half hours after drinking the maté, I felt so sick that I had to lie down and stop tobacco for the rest of the day The beverage had evidently some soporific action for I fell asleep On the next day I felt sick and inclined to vomit about the same time after drinking it and had to get out into the open air On the following day I still continued the beverage I did not have the sensation of nausea, but I felt far from comfortable On the day following there was no nausea but three hours after taking the beverage I noticed that I could not ascend a hill with the customary rapidity At this stage I had to cut off one breakfast cup of tea a day (I take three a day as a rule) and I had to curtail my allow ance of tobacco The beverage was continued for a week longer and now and again I felt the same heaviness in the legs and I was drowsy now and then, but I had no more sensations of nausea The flavour of the mate was before me at all times, even in the night if I chanced to wake Two days I had dull, drowsy headache of a kind un known to me The beverage appears to have some laxative action. At this stage I stopped the maté I found that I could not enjoy my pipe, in fact, I was gradually being weaned from tobacco—and I like the weed After a week's stoppage I started the beverage once again, this time taking it with juice of fresh lemon instead of sugar and cream This I found pleasanter than sugar and cream, but after all it needed some effort to overcome the peculiar aroma and soon I left off the beverage altogether and concluded that I could not with justice inflict it on my worst patient Of course individual peculiarity must always be allowed for in this as in all other therapeutic experiments but after allowing for all this I hardly think maté is ever likely to be used by those who have once experienced the delights of well prepared China tea or coffee There may be something in the climate and surroundings of South America which makes maté tolerable in those parts

The physiological action of an ethereal extract of maté — 250 grams of maté were exhausted with absolute ether The resulting green extract (which had the aroma of maté) was further treated with absolute ether filtered and dried at the ordinary temperature The extract contained probably wax, fat, colouring matter, resins (if any), glucoside, and choline The whole of this extract was swallowed just before a full meal The effects noted were as follows In an hour there was nausea with saliva rising into the mouth, and vomiting was only with a great effort averted This sensation con tinued more or less for six hours—that is till bed time Two hours after taking the extract there was great discomfort in the region of the transverse colon, but no diarrhœa These conditions were crowned by a sleepless night and a headache next morning which disappeared after breakfast. The aroma of maté is a constant companion all the day following the taking of the extract The extract may have had some slight diuretic action The maté remaining after exhaustion with absolute ether was examined and was found to contain caffeine and tannin as its chief constituents An infusion tasted strongly of tannin and was found to be a most insipid beverage, showing how little caffeine has to do with the exhilarating properties of the caffeine-containing plants This is experienced in the case of China tea The high priced teas which have a fine aroma and pleasant refreshing properties often contain little caffeine, while the cheap teas may contain a large proportion but are almost devoid of aroma

There can be little doubt, I think, that maté has not a flavour peculiar to itself but has simply that of the holly order to which it belongs, for I roasted some ordinary holly leaves and found the aroma similar to that possessed by maté

Leeds

A CASE OF

PERFORATED GASTRIC ULCER, OPERATION, RECOVERY

BY CHARLES R BOX, M D B S, B Sc, M R C P LOND, F R C S ENG,

RESIDENT ASSISTANT PHYSICIAN TO ST THOMAS'S HOSPITAL

AND

F OWEN THURSTON, M B, B S LOND, F R C S ENG,

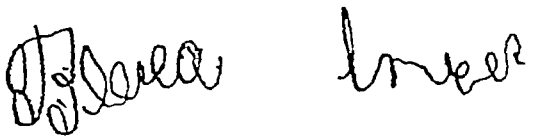
LATE SURGICAL REGISTRAR TO ST THOMAS'S HOSPITAL.

A FAIRLY nourished but somewhat anæmic-looking girl, aged 17 years, was brought to St Thomas's Hospital at 1 30 A M on Jan 7th, 1899, complaining of violent abdominal pain and sickness Inquiries elicited the following history For several years the patient had been under medical treatment for pain after food and occasional sickness For the past 12 months her pain and discomfort after food had been so great that she at times limited herself to a diet of bread, butter, and milk, feeling much relieved by so doing Twice during the same period she had vomited small quantities of blood, the last occasion being in October, 1898 For a few weeks before admission she had been taking an ordinary diet without experiencing any great discomfort At 2 P M on Jan 6th, 1899, she was seized with violent abdominal pain She had just before partaken freely of steak pie A seidlitz powder was given but it only produced vomiting There was no blood in the vomit The pain continued unabated till she was admitted to hospital 12 hours later The abdomen was then motionless, moderately distended, and generally tender Rigidity of the walls was very slight and did not interfere with examination No localised tender spot could be found There was no evidence of free fluid in the abdomen The liver dulness began at the sixth rib and continued downwards for two and a half inches, disappearing one and a half inches above the costal margin The pulse rate was 124 and the beat was strong The temperature was 100 2° F There was no evidence of disease of the thoracic viscera and the urine was free from albumin After removal of the patient to bed it was found that the liver dulness in the nipple line had diminished considerably and that it was now restricted to a rib's breadth The abdominal signs were slight but definite and these, coupled with the very circumstantial history of gastric trouble and the abrupt onset of pain, were thought to justify the diagnosis of perforated gastric ulcer and to call for immediate operative interference. The patient's general condition was exceedingly good

Thirteen and a half hours after the onset of the symptoms the abdomen was opened through the left rectus muscle close to the middle line and above the umbilicus A little turbid fluid escaped on incising the peritoneum and a large stomach immediately presented. As a little fibrinous exudation was present near the pyloric extremity of the viscus and on the under surface of the liver search was made in this neighbourhood for the ulcer but none was found A small perforation of about an eighth of an inch in diameter was ultimately discovered on the anterior surface of the stomach near the cardiac orifice and just below the lesser curvature Free access was gained to the perforation by prolonging the abdominal incision as far as the ensiform cartilage and dividing the left rectus transversely The perforation through which gas and gastric contents bubbled, was found to be surrounded by so extensive a zone of induration that excision was out of the question The whole indurated area was therefore inverted by Lembert sutures Complete inversion was necessary since sutures passed through the indurated area itself would not hold A second row of sutures was passed to reinforce the first All exudation in the neighbourhood of the perforation having been removed, the peritoneal recess above the costo-colic fold was carefully cleansed by sponging, previous experience with

entirely to an inability to properly guide the delicate movements of the fingers, although there may possibly have been in addition some degree of mental impairment This group may be contrasted with the second, in which as soon as the choreic movements were controlled the patients were

FIG 11

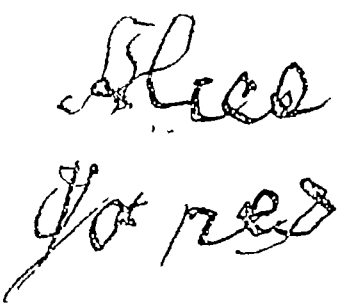


able to write with ease and in which therefore the element of incoördination must have been entirely, or almost entirely, absent I believe however, that incoördination plays a considerable part in the disorder of many of the cases included in the first group

5 The fifth group contains two cases only and in these there was either complete or almost complete inability to write at all, although the choreic movements were of very moderate severity This inability arose, I am inclined to think, mainly from intellectual defect In the first of the two cases the attempt to write resulted in the production of nothing more than a few meaningless scratches on the paper, yet the choreic movements were by no means severe It is interesting to note that the power of speech was in this case almost abolished, "yes" being the only word spoken, and that with much difficulty and after long hesitation As far as I could judge from this one word the articulation was not greatly at fault The second case was that of a boy who succeeded with the utmost difficulty in writing the first two letters of his name and appeared then to lose all idea as to what was to come next His movements were also slight. Speech was a mere unintelligible jargon of considerable volubility

In conclusion, I must refer to a question which may be raised with regard to my cases—namely, whether they are all cases of true chorea I am well aware that it has been maintained by some observers that the power of controlling choreic movements during voluntary action is met with only in cases of hysterical chorea, but my own experience directly contradicts this belief I have carefully watched my cases from this point of view and have moreover kept nearly all the patients under observation during their illness, and I can positively say that all the cases upon which my paper is based were so far as I am capable of forming an opinion, instances of true chorea, and ran the ordinary course of that complaint On the other hand, I give one more illustration (Fig 12), namely, the autograph of a girl who was obviously

FIG 12



suffering from hysterical chorea, and here it will be seen that even the slight power of control exercised temporarily by the cases in the first group is entirely wanting, and that the individual lines of the letters possess in consequence a jerky irregularity which is not seen in any of the other specimens

To sum up, the cases belonging to the five groups may be described as follows (1) little or no power of control over the movements, incoördination probably present in at least many of the cases, (2) power of control practically complete, no incoördination, (3) no choreiform movements or movements very slight, much incoördination, (4) control over choreic movements perfect, great incoördination, and (5) movements moderate, much central defect, writing impossible

Birmingham

MATÉ OR PARAGUAY TEA.

BY GORDON SHARP, M D EDIN

DURING the past 60 years maté or Paraguay tea has been at intervals brought before the notice of the profession as a substitute for China tea In the *Pharmaceutical Journal* of July 16th, 1898, Professor McKendrick and Dr D F Harris have given a summary of the chemistry of maté and have asked for a more extended trial of the beverage After reading this article I resolved to try the beverage on my patients and on myself

Maté is a native of the Argentine Republic and other parts of South America It belongs to the same natural order as the common holly and it is known by the botanical name Ilex paraguayensis, although six at least species of Ilex are grouped under the one specific name. Maté is also known as "Jesuits' tea" and "St Bartholomew's tea," so that Europeans probably owe their knowledge of mate to the disciples of Loyola Like tea and coffee maté contains as its chief constituent caffeine (or theine) And here let me remark how widely distributed over the vegetable world are the caffeine-containing plants China tea belongs to the tea or camellia order, coffee to the madder (Rubiaceæ) order, guarana to the soapwort (Sapindaceæ) order, kola to the silk-cotton or chocolate (Sterculiaceæ) order, and maté, as I have said to the holly order (Aquifoliaceæ) Besides caffeine maté contains a peculiar tannin, traces of ethereal oils, wax, a glucoside or glucosides, choline (a substance which acts like curare or muscarine), and a fatty body to which maté owes its peculiar flavour The proportion of caffeine is, on the average, not much different from that found in tea or coffee The maté leaves and small twigs are gathered, dried, and roasted The roasting develops the aroma In the Argentine Republic the leaves are said to be left whole, but in Brazil the maté is found in a powdered state The maté which I had was made up of powdered leaves, pieces of twigs, and evidently dried berries, so that my sample may have come from Brazil

The advantages claimed for maté are (1) that the infusion may be boiled without deterioration and may be taken hot or cold, (2) that the tannin is highly soluble and interferes little or not at all with gastric digestion, and (3) that the beverage acts as a cerebral depressant and therefore does not keep one awake at night as tea and coffee do The tannin of maté does not tan leather, neither does it coagulate a solution of gelatin With perchloride of iron it gives a greenish colouration instead of the inky fluid given by an infusion of China tea I have compared a solution of egg albumen when acted upon by infusions of maté and China tea With maté the egg albumen is sent down as a fine white precipitate which on shaking is readily mixed with the fluid and which only slowly settles down With China tea, on the other hand, the egg albumen separates out into a brown precipitate which floats on the top of the fluid in small pellets and when shaken up at once separates and collects on the top This may be said to be the case for maté The opposite side will appear in my own experience of the beverage to be mentioned presently

Maté is prepared in the ordinary manner of China tea and the same quantity is employed The Brazil maté, on account of being mostly in fine powder, has to be strained through a fine wire sieve or muslin Even then a sediment is found at the bottom of the cup and a large part of this is found to be fine sand which gets in during the roasting of the leaves and twigs The beverage may be drunk with sugar and cream or with a squeeze of lemon Personally I prefer the lemon The colour of the infusion is a light green and thus it lacks the inviting appearance of China tea or coffee The aroma is peculiar and repellent although one is said to get over this If a cupful of the beverage is allowed to stand for a few minutes a waxy or fatty substance collects on the top and if this be skimmed off and tasted it is found to have the extreme flavour of the beverage The South American native does not prepare the beverage in the manner which I have mentioned He makes a round hole of the size of a halfpenny in a pepo or gourd and scoops out the contents This is his teapot or maté (hence the name the tea has received) This gourd he fills with tea, pours in boiling water, and inserts a long strainer

The post-tibial artery at the ankle was pulsating normally The temperature was then 101° By 6 P M the temperature had risen without a rigor to 105° and the pulse was 160 Later in the evening the temperature was two degrees lower but the gangrene had advanced an inch up the leg No emphysematous crackling was present Early next morning the general condition was fairly good the temperature being 102, but a yellowish discolouration had advanced to the lower part of the thigh, especially in the course of the internal saphenous vein Immediate operation having been decided on Dr Milward amputated for Mr Heaton through the middle of the thigh The cellular tissue on the inner aspect of the limb where divided was markedly œdematous and of a yellowish hue Cultivations taken from this part and from the interior of the saphenous vein yielded, however, no result The lad suffered greatly from the shock of the operation but rallied well with strychnine, brandy, and saline infusions into both axillæ On incising afterwards the amputated foot gas came from it freely The patient's subsequent progress was uneventful Slight suppuration between the flaps occurred but without constitutional symptoms and he was discharged from the hospital with a perfectly healed stump on Feb 19th

Remarks by Dr MILWARD —With regard to the bacteriology of the above case Dr C P White (late pathologist to the hospital and now of the Leeds School of Medicine) who investigated Case 1 tells me that he succeeded in isolating four organisms, the chief of which was the bacillus of Tricomi He also found a few colonies of the bacillus coli communis The bacillus of malignant œdema was not present Dr White's investigations on this case are as yet incomplete and I must thank him for allowing me the use of these few preliminary notes With regard to Case 2 Dr S McDonald pathologist to the hospital, has kindly supplied me with the following notes Films from the exudate near the spreading margins, where emphysema was marked, showed numerous bacilli of various sizes and a few staphylococci Nearer the wound were numerous micrococci and bacilli Some of these bacilli whose appearance suggested that of the bacillus of malignant œdema could not be identified as such when successively cultivated on glucose gelatin and glucose agar The following organisms were isolated (1) staphylococcus pyogenes aureus, (2) staphylococcus pyogenes albus; (3) a bacillus apparently identical with the bacillus proteus vulgaris, and (4) a staphylococcus of nearly twice the size of the staphylococcus pyogenes aureus, which did not stain by Gram's method and only grew well in deep cultures, in glucose gelatin and agar, appearing there as perfectly discrete yellowish brown colonies without causing liquefaction Cultivated in 10 per cent. gelatin the organism grew only in the deeper parts of the tube and never on the surface Several sub-cultivations were made from glucose gelatin and glucose agar but the organism died out in a few weeks The organism appeared to grow almost as rapidly at room temperature as at 37° C There was no opportunity of testing its pathogenic properties

Looked at from a clinical aspect these two cases, although very similar, would not appear to be quite identical Case 1 seems to correspond entirely with the disease known as acute spreading traumatic gangrene, emphysema being particularly marked, even in parts of the limb well above the advancing inflamed area. The necrosis had advanced with its usual rapidity in these cases and constitutional symptoms were of a sthenic type the subject being young and otherwise healthy The necessity of leaving emphysematous tissues in the stump undoubtedly made the prognosis very grave, but its subsequent disappearance seemed to point to microbic products rather than to the actual presence of micro-organisms in this part of the limb In Case 2 injury to blood vessels might be suspected, but the circulation in the foot was in no wise affected until necrosis had invaded it from the site of fracture At the time of amputation the deeper cellular planes of the thigh were in a highly œdematous and discoloured state. Emphysema was only well marked where putrefaction had occurred The micro-organisms appeared to be mainly pyogenic, but the large anaerobic staphylococcus described by Dr McDonald is worthy of notice I owe my thanks to Mr Heaton for kindly allowing me to publish these cases; to Mr Ryland, late house surgeon, for supplying me with notes on Case 1, and to Dr C P White and Dr McDonald for their bacteriological notes

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Multiple Calculi

A MEETING of this society was held on March 28th, the President, Mr BRYANT, being in the chair

Mr REGINALD HARRISON read a paper on two cases where Multiple Calculi were removed from large Narrow necked Sacculi connected with the Male Urinary Bladder The first case was that of a man, aged 56 years, who came under observation in August 1892, with symptoms of vesical calculus A small stone was detected on sounding and was crushed, but as this was not sufficient to account for the symptoms present a median perineal cystotomy was proceeded with and 34 stones weighing over 1½ drachms were withdrawn from a sac to the left of the prostate The interval between the bottom of the sac and the rectum was very small A drainage tube was fixed in the sac The patient left the surgical home in which the operation had taken place 24 days later A perineal fistula persisted In 1894 a suprapubic cystotomy was performed and the bladder and sac were drained by that route As this did not appear to have any appreciable effect upon the sinus the suprapubic wound was allowed to close The patient died in 1896 with the fistula still open The second case was that of a man, aged 50 years, first seen in July, 1897 In that year several small friable calculi were removed from the bladder by the lithotrite and wash bottle About this time it was first observed that the bladder had a large sac in it which could be independently catheterised In April 1898, the patient suffered suddenly and acutely from cystitis, and on May 4th suprapubic cystotomy was performed The lateral lobes of the prostate were found to be much enlarged, and to the right and a little below the corresponding ureter was the opening into a sac, just admitting the index finger The sac was full of foul, purulent urine, and it contained several stones The latter were removed and the pouch was washed out and a drainage tube was fixed into it as well as into the bladder In three weeks the patient was out of bed and doing well Towards the end of June, 1898, he had several rigors and high temperatures in spite of careful irrigation of the bladder, so the wound was reopened and the pouch was washed out and again examined with the view of draining the latter through the perineum This had to be abandoned by reason of the relation of the sac to large vessels which could be distinctly felt by the finger, and the original mode of drainage was reverted to The enlarged prostatic lobes were also removed The condition of the patient was reported as being much improved Mr Harrison remarked that the difficulty in dealing with these two cases arose, not in the removal of the stones but in providing for the drainage and subsequent obliteration of the sacs in which the calculi were contained He advocated the method of draining some of these sacs after their exploration by suprapubic cystotomy from the perineum, and in support of this proposition he referred to two other cases which seemed to favour this method of procedure The origin of the calculi removed was also referred to and it was suggested that they were probably formed in the sacs and had not passed down from the kidney

Mr BRUCE CLARKE said that he had met with a number of these cases and he hoped to publish a paper on the subject shortly It was doubtful whether a real distinction could be drawn between protrusions of mucous membrane alone and those in which all coats were involved It was most difficult to identify the different coats even microscopically, especially where ulceration had taken place Probably in cases where the mucous membrane had been destroyed by ulceration there was most chance of contraction and obliteration of the sac after removal of the calculi The diagnosis was most difficult and often the cyst could only be discovered by an exploratory incision into the bladder which was therefore desirable in doubtful cases For exploration Mr Bruce Clarke advocated the suprapubic operation as a better view of the bladder could be obtained and it was easier to get at the sac It must be remembered that in some cases the sac abutted on the peritoneum and in one case death occurred from rupture into the peritoneal

unsuccessful cases having impressed upon us the necessity of paying particular attention to this region On investigating further a quantity of turbid greasy fluid was found in the pelvis, so the latter was drained by a counter opening above the pubes The general peritoneum, but not the lesser sac, was now thoroughly irrigated with sterilised water and all excess of fluid was removed by sponging A Keith's glass tube was introduced into the pelvis and a gauze drain through the upper wound to the site of the ulcer The upper wound was then almost completely closed The operation lasted 40 minutes, there was remarkably little shock and the pulse rate, which was 120 at the beginning of the operation, was 132 at the end The anæsthetic used was ether

The patient was comfortable after the operation She had very little pain and she slept well At 10 30 A M on Jan 7th she vomited half a pint of odourless brown fluid The pulse rate was now 120 and the temperature was 98 2° The tongue was rather dry The abdomen was not distended and was moving freely in respiration A considerable amount of blood-stained discharge was escaping through the pelvic drainage tube through which a gauze drain was now introduced The patient was being fed by the rectum and having in addition in the same way a pint of normal saline solution twice daily, also three ounces of brandy The glass drainage tube was removed from the pelvis after the lapse of 32 hours and the bowels were relieved by a simple enema The aspect of the patient was good and her pulse rate was gradually falling Vomiting, unaccompanied by much retching still occurred at intervals and the abdomen became generally but slightly distended again On the evening of the second day after the operation (Jan 9th) five minims of tincture of iodine were given by the mouth, this was immediately rejected but the vomiting now ceased entirely On the same day the amount of saline fluid administered by the rectum was increased to three pints on account of thirst On the next day the bowels acted twice, the distension of the abdomen disappeared, and the pulse had fallen to 100 From this time the progress of the case was eminently satisfactory, the pulse rate continuing to fall and the temperature, with the exception of a rise to 100° on the evening of Jan 11th, remaining practically normal The gauze drain leading to the ulcer was removed on the 11th, it smelt quite sweet and was replaced by a small plug which was finally discarded on the 20th Some of the stitches were removed on the 16th and the remainder on the 20th Feeding by the mouth was commenced 11 days after the operation At first only two drachms of peptonised milk were given every hour but the quantity was gradually increased Three days later rectal feeding was altogether discontinued and 14 days later the patient took boiled sole without discomfort Convalescence was retarded by a slight attack of tonsillitis and a small alveolar abscess Within five weeks of the operation the patient was up and she finally went to a convalescent home apparently in the best of health She remains well with the exception of a tendency to constipation and occasional slight discomfort after meals

Several factors contributed to the successful issue of this case The perforation was small and accessible so that there was probably but little escape of gastric contents and closure was an easy matter The general condition of the patient was extremely good, allowing the cleansing of the peritoneum to be thoroughly effected There was no doubt about the exposure to infection of the general peritoneal cavity, this being shown by the collection of turbid fluid in the pelvis, although the only fibrinous deposits were met with in the neighbourhood of the ulcer, it is probable, however, that the infecting material was not very virulent The cleansing was effected by a combination of irrigation and sponging If restricted to one of these methods we should prefer the former, both on the score of celerity and on account of the improvement often produced in the general condition There is no doubt, however, that by sponging the peri hepatic and the peri splenic regions can be more thoroughly cleaned and the risk of residual abscesses in these situations is minimised With regard to the drainage of the pelvis our experience has been that it is a very necessary adjunct in these cases It was not thought necessary to open and flush the lesser sac of the peritoneum and the result of the case justified this omission Of course, the most important point of all is that the operation was performed without delay, while the condition of the patient was favourable and none of the toxæmic symptoms of general peritonitis were present

For permission to publish this case we are indebted to Dr Acland and Mr Pitts for whom we were respectively acting at the time of admission of the case

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias tum aliorum tum proprias collectas habere et inter se comparare —MORGAGNI *De Sed. et Caus. Morb.*, lib iv Proœmium

GENERAL HOSPITAL BIRMINGHAM

TWO CASES OF SPREADING TRAUMATIC GANGRENE; AMPUTATION, RECOVERY

(Under the care of Mr GEORGE HEATON)

IT is now generally admitted that although the majority of cases of spreading traumatic gangrene are due to the presence of the bacillus of malignant œdema a few are connected with other micro-organisms A few instances have been recorded of the presence of the bacillus coli communis, we published one such case in the Mirror of Hospital Practice in 1897 The first of the two cases recorded below can hardly belong to this class, for the bacillus coli communis was not the chief organism present For the notes of the cases we are indebted to Dr I Victor Milward, resident surgical officer

CASE 1 —A slightly built pale boy, aged eight years, was admitted to the out patient department of the General Hospital, Birmingham, on May 16th, 1898, having sustained a fracture of the left radius and ulna in their lower thirds On the anterior surface of the forearm over the site of the fracture there was a small V shaped wound measuring about a quarter of an inch The wound was thoroughly cleansed with soap and water and corrosive sublimate solution, sealed up with collodion, and treated with splints in the usual manner On the following day when the patient attended at the hospital the parts looked perfectly healthy He did not come back again, as told to do, until the 20th He then looked ill and had a highly furred tongue and a small quick pulse He also complained of slight pain On removing the splints the hand was found to be black and cold, the forearm was dusky, and there was brawny swelling about the elbow Emphysema had already extended to the arm The temperature was 103 4° F Mr Heaton advised immediate amputation and at 4 1 M Mr Ryland removed the limb at the shoulder joint Bubbles of gas came freely from the cut surfaces and it is worthy of note that the flaps themselves were emphysematous The wound was dressed with iodoform gauze and drained By 10 P M the temperature had fallen to 99° and there was a corresponding decrease in the pulse rate The boy subsequently made a very rapid recovery On the second day the emphysema had disappeared from the flaps and the tube was taken out, on the eighth day he was up, and he was finally discharged from the hospital in about a month, a small sinus delaying his otherwise complete recovery before that time

CASE 2 —A boy, aged nine years was admitted into the General Hospital, Birmingham, on Jan 5th, 1899, suffering from a compound fracture of the right tibia and fibula through their lower thirds He had been climbing a wall when some of the bricks gave way and fell on his leg On admission there was found over the site of fracture a small wound about a third of an inch long which was bleeding freely and he was said to have lost much blood before admission The wound was thoroughly cleansed with soap and water and corrosive sublimate solution and dressed with iodoform and sterilised gauze On the following day the temperature was 101° F and the urine showed a distinct trace of sugar, which, however, was never subsequently found On the 7th at 11 A M the toes were noticed for the first time to be distinctly blue and there were discolouration and bullæ on the dorsum of the foot

rest and sleep the enlargement of the thorax during inspiration was enough to suck the blood from the abdomen into the right heart During vigorous efforts in addition to this suction action the abdominal walls contracting simultaneously at each inspiration forced the blood from the capacious abdominal veins into the heart When the muscles of the limbs and the abdomen contracted together as much as a pint or two of blood might be suddenly forced into the right heart This sudden plethora would hopelessly stretch and dilate the thin wall of the right heart were it not supported by the tough fibrous pericardium, as the leather case supports the football or the outer case supports the inner case of a Dunlop bicycle tyre Experiments were shown to demonstrate this point and it was stated that the pericardium limited by about one half the capacity of a heart in diastole The pulmonary circulation was largely due to the respiratory movements The contraction of the abdominal muscles and the enlargement of the thorax during inspiration transferred blood from the abdominal veins to the lungs The following expiration tended to pass it on from the lungs through the left heart into the arteries The hepatic circulation was produced by the squeezing of the portal vein during inspiration Points of pathological interest were to be found in all parts of this venous circulation. When the muscles of the legs failed to perform their functions varicose veins and œdema of the feet followed, as was exemplified in cases of Pott's fracture and flat foot Many neurasthenic troubles were traced by Mr Barnard to a lax and feebly acting abdominal wall in a person with a naturally low blood pressure The blood leaked into a capacious portal system and was not rapidly returned to the heart The ill filled heart was unable to maintain a constant blood supply to the brain Abdominal massage followed by exercises and belts was recommended for such cases. When the pericardium softened in pericarditis coughing or even moderate exercise would not only fill the heart with blood but stretch the pericardium supporting it It seemed probable that a pericardium so dilated did not re-contract to its former dimensions The right heart being unsupported would always become dilated and its valves incompetent with even moderate efforts Speaking of pericarditis with effusion Mr Barnard believed that he had demonstrated by experiments on animals that one type of the terrible dyspnœa met with in that disorder was preservative for the violent muscular spasms were directed to forcing blood through the compressed heart He thought that this form of dyspnœa was the imperative call for releasing the effusion, of course by the open method.—Mr F C WALLIS said that it was not easy to see how Mr Barnard's explanation held with regard to varicose superficial veins Mr Barnard had made out a very good case for relieving the pericardium in cases of effusion where there was great effusion He had only seen this attempted in one case and then the patient died from the anæsthetic Mr Wallis agreed that the pericardium should be opened by a surgical incision and not by a trocar and considered that chloroform was inadvisable and that a local anæsthetic, preferably eucaine, should be employed —Mr BARNARD, in reply, said that he thought that the reason why the superficial veins became varicose was because if the person were constantly in the upright position the deeper veins were kept closed by the pressure of the contracted muscles and all the blood had to return by the superficial veins

CLINICAL SOCIETY OF LONDON

Abdominal Aneurysm treated by Insertion of Silver Wire — Results of Operations for Pyloric Obstruction —Lymphangioma Tuberosum Multiplex.

A MEETING of this society was held on March 24th, the President Mr LANGTON being in the chair

The PRESIDENT related a case of Aneurysm of the Abdominal Aorta successfully treated by the introduction of silver wire The patient was a woman who had had an abdominal swelling since the birth of a child three months before She had wasted having lost two stones in 12 months On admission there was a pulsating tumour in the epigastrium three and a half inches in diameter which was moveable laterally but not vertically and there was a loud systolic murmur over it. In April 1898, as the swelling was increasing and the pain was very severe, an exploratory laparotomy was performed and the tumour was found to be an aneurysm of the upper part of the abdominal aorta A trocar was introduced into the sac and not much blood issued from the cannula when the trocar was withdrawn As there was some difficulty in introducing salmon gut into the sac silver wire was used and five feet were introduced without difficulty The puncture was secured with a silk ligature There were some vomiting and a good deal of restlessness after the operation A month later the tumour was carefully examined and it was found that consolidation was occurring As a result of the manipulation however, there were a return of the vomiting a severe rigor, and collapse These alarming symptoms yielded to treatment and the after progress was uneventful. She had been seen from time to time and there was now a hard mass in the middle line much smaller than before the operation and the thrill and bruit had disappeared Her health was excellent There were only a few cases of successful treatment by this method on record.—Dr GLOVER warmly congratulated Mr Langton on his successful operation and regretted the absence of surgeons of experience who might have discussed the paper

Mr RUTHERFORD MORISON brought forward a very interesting series of cases illustrating the Result of Operations for Pyloric Obstruction The patients were shown and sections from the growths removed were exhibited by the lantern. 1 A case of recovery after Pyloroplasty for Stricture of the Pylorus The patient was a woman who was operated on in October 1894 the case being published in THE LANCET of Feb 16th, 1895, p 396 At the time of the operation she was fed entirely by the rectum She was now in perfect health and could eat anything He made an incision one and a quarter inches from the pylorus, passed a guide through it and then made an incision through all the coats, and then sutured the incision so that the line of union was transverse to the incision Mr Morison had performed this operation 19 times and all the patients had recovered. Relapses did not occur 2 Cases of Pylorectomy for Malignant Disease Case 1 A woman, aged 40 years who had had severe pain after food for six months and vomiting and emaciation for two months There was a tumour of the size of an orange which could be felt near the umbilicus and which proved to be a scirrhous mass Pylorectomy was performed in October 1897 She could now eat anything was in good health, weighed one and a half stones more than before the operation, and there was no evidence of recurrence Case 2 A man aged 48 years, who had had severe pain after food and emaciation for some time. There was a growth of encephaloid cancer reaching nearly up to the pylorus which was excised with the growth He was now in good health and had gained 19 lb in the six months after the operation Case 3 A woman, aged 40 years who had had pain and vomiting for a year There was great dilatation of the stomach due to an adenocarcinomatous growth of the size of a walnut in the pylorus She had gained two stones since the operation in September 1898 Case 4 A man, aged 38 years, who had rapidly emaciated and suffered from pain and vomiting for 10 weeks There was an extensive colloid carcinoma involving the pyloric half of the stomach which was removed and the cardiac end was joined to the duodenum by a modification of Billroth's method A chain of glands was affected and had to be removed The patient was now in excellent health and there were no signs of recurrence. Case 5 A man, aged 41 years on whom pylorectomy had been performed six weeks ago for a small scirrhous mass The man was now quite well and had gained more than a stone in weight The operation was in Mr Morison's opinion, safer than gastro-enterostomy and should be performed whenever the tumour was moveable the size of the tumour not being an important consideration —Mr CHARTERS SYMONDS congratulated Mr Morison on his remarkable results He had tried the method of pyloroplasty described in one instance with a satisfactory result and when he had to operate on the patient later for some other trouble he found that no adhesions had occurred In one case of pylorectomy he had found difficulty in joining the duodenum and stomach and he had finally to employ a Murphy's button. The ultimate result was good, the patient being able to return to work. He was inclined to think more favourably of gastro-enterostomy than Mr Morison appeared to do He had performed the operation 20 times and had seen nothing but good from it. It had given great relief where removal was impossible.—Mr W G SPENCER also congratulated Mr Morison on his

cavity In one case he was able to catch the sac wall with forceps and invaginate it into the bladder He kept it everted for several days before removing the forceps and it afterwards appeared to become obliterated In those cases in which there was a large sac between the rectum and the bladder perineal drainage might be the best method of treatment

The PRESIDENT did not agree with Mr Bruce Clarke as to the adoption of a suprapubic incision into the bladder, holding that the bladder was better drained through the perineum He preferred the median operation, by which the bladder was reached with great ease and with very little bleeding Mr Bryant gave details of one case in which there were many stones in a sac behind an enlarged prostate in which perineal drainage led to complete recovery He had also met with others of the same nature in which stones had been successfully crushed but the symptoms persisted owing to the presence of calculi in a sacculus Mr Bryant mentioned one case in which he crushed a stone but no fragments could be washed out He believed that they got into a sacculus, but the patient refused to submit to an exploratory operation As regarded the origin of the stones all the specimens in the museums were strikingly similar in their characteristics Mr Bryant thought it most probable that they were formed in the bladder and dropped into the sac

Dr THEODORE WILLIAMS and Dr HERBERT HORROCKS then communicated a paper on the Treatment of Pulmonary Tuberculosis by Anti tuberculous Serum, an abstract of which we shall publish next week

MEDICAL SOCIETY OF LONDON

Deaths from Functional Nervous Disease —Pathology of the Pericardium

A MEETING of this society was held on March 27th, the President, Mr EDMUND OWEN, being in the chair

The PRESIDENT referred to the loss which the society had sustained in the recent deaths of Dr Heinrich Port and Dr John Brunton

Dr ROBERT MAGUIRE read a paper upon Deaths from Functional Nervous Disease which he maintained were due to exhaustion of grey nerve matter He eliminated deaths from asthenia, tuberculosis, disturbance of the respiratory centre, heart failure, or vaso motor paralysis, as occurring in the course of acute mania, status epilepticus anorexia nervosa and other hysterical conditions, concussion, fright, and shock, and explained that the cases he had to describe were deaths actually from functional nervous disease He showed that in such cases all the bodily functions failed equally, with the exception of the functions of those of the higher nervous system In death from senile decay, the condition in which there was the most equal deterioration of the somatic powers, there was nevertheless usually a predominance of failure of one particular system, generally that of the heart, since that organ had no chance of rest But in such cases as Dr Maguire referred to the only system at fault was the highest nervous system and therefore he considered that the death was due to exhaustion of the grey nervous matter which controlled all the other functions He described four cases which had come under his own observation bearing upon this point The first was that of a woman who, without other physical symptoms, developed blindness after a fall The case was diagnosed as traumatic hysteria, but suddenly the patient became unconscious, had unequal pupils, and perspired on one side of the head and neck It was then thought that she must have cerebellar tumour, but, death occurring, nothing was found at the necropsy The patient had shown hysterical symptoms before the fall The second case was that of a young woman brought to St Mary's Hospital in an unconscious state, in which she lay for four days before death, presenting no signs of disease except unconsciousness There was no trace of poisoning and nothing was found post mortem She had been greatly troubled before the attack. The third case was that of a medical student who had lived too sparingly had had difficulty in completing his curriculum, but shortly after passing his examinations became unconscious, presenting no other physical signs of disease It was thought that he might be suffering from encephalitis, but in three months he gradually recovered He began practice, married, was over worked, and in three years' time was taken ill again with similar symptoms and died Nothing whatever was found at the necropsy In the fourth case Dr Maguire had diagnosed the condition during life and the diagnosis was confirmed post mortem A clergyman of taciturn habits, living the life of a literary recluse and having undergone severe mental trials, became unconscious and showed no other symptoms He died and nothing was found at the necropsy In all the four cases uræmia, syphilis, alcoholism, and poisoning were carefully excluded Dr Maguire called attention to the case of a schoolboy, reported at one of the other societies some years ago, who became unconscious while running at "hare and hounds," and he thought that his death was best explained by exhaustion of grey matter Dr Maguire believed that this point of pathology of death, which seemed to have been overlooked, was of somewhat wide importance By it he explained the sense of impending death which of no importance in the young and those suffering from very acute diseases, was of a serious omen in the old and those who had more prolonged illnesses These had no recuperative power Similarly patients of an eastern nation would die if they made up their minds to die, while those of western nations, even though neurotic, had more reserve vitality and their morbid fears were of less moment. Dr Maguire said that hints on the physiology of the subject might be obtained from a paper by Dr Augustus Waller on the "Sense of Effort,' published in *Brain* — Dr A E SANSOM said that although nothing was found by the morbid anatomist there might have been some change not yet recognised In former days many different conditions were grouped under the name "amaurosis"—once defined as a "disease in which neither the doctor nor the patient could see anything"—which had long since been differentiated There were other diseases in which death sometimes occurred without any discoverable lesion such as epilepsy and some cases of angina pectoris Dr Maguire spoke of exhaustion of the grey matter but that was rather vague Dr Sansom thought that the symptoms rather pointed to failure of nutrition of that part of the nervous system connected with the vagus nerve, possibly induced by unknown zymotic causes He suggested that some of the cases of death supposed to be due to fatty degeneration of the heart were really cases similar to those described by Dr Maguire in his paper Fatty degeneration was an extremely rare cause of sudden death, having been the cause in only three of 860 cases of sudden death investigated in Vienna and in those was secondary to atheroma of the coronary arteries —Dr SEYMOUR TUKE said that in some respects the symptoms exhibited by Dr Maguire's cases, especially the first, bore some resemblance to those seen in cases of general paralysis Following their epileptiform seizures patients often lay in a semi unconscious condition for days and emaciation often followed progressively although a large quantity of food was taken He asked if there were any rise of temperature in Dr Maguire's cases In two cases of general paralysis he had seen lately there was rise of temperature before death reaching to 107°F in one case and to 108° in the other —Mr PEEKE RICHARDS thought that after symptoms had existed so long there must have been changes in the grey matter had the symptoms been due to disease of that structure —Mr W H BATTLE mentioned a case with urgent symptoms supposed to be due to gastric ulcer in which the patient lived for three weeks and after death nothing whatever abnormal could be discovered —Dr MAGUIRE, in reply said that the prolonged unconsciousness made it clear that the trouble was not confined to the vagus He held that there was exhaustion of Hughlings Jackson's "highest centres" He quite agreed that there were points of resemblance to general paralysis since that was due to failure of the same highest centres

Mr HAROLD BARNARD read a paper on Certain Points in the Pathology of the Pericardium (This paper we hope to publish at length in an early issue) He observed that the pericardium was only a part of the mechanism of venous circulation which must therefore be considered with it The researches of Dr Leonard Hill and himself had shown that the heart could not carry on the circulation of man if he constantly maintained the erect position The return of blood from the legs and abdomen to the heart was effected by the contraction of skeletal muscles The muscles of the limbs forcibly emptied their veins into the right heart at each contraction during walking or running The contractions of the muscular sphere which enclosed the abdominal viscera were a part of the respiratory movements During

hours after being first seen and 25 days after the first symptoms The main points of interest were (1) the very acute character of the case, (2) the affection being of the spleno-medullary variety and not of the lymphatic (as most cases are), (3) leucocytes being distinctly in excess of red cells, the latter varying much in size and shape, (4) the absence of hæmorrhages, except some suspected retinal extravasations a few hours before death, (5) the fact that vomiting occurred only once, (6) the absence of any marked rise of temperature, and (7) the astounding rapidity with which emaciation occurred (four days), in spite of the satisfactory amount of nourishment taken, sufficing to reduce a really well nourished woman almost to a condition of skin and bones —Mr R W Murray read notes of a case of Suppurative Peritonitis treated successfully by incision and careful cleansing The discussion on this case was adjourned.—Dr Abram reported two cases of Lympho-sarcoma and showed lantern slides and specimens illustrating the clinical and anatomical features He drew attention to the conflicting views in vogue concerning lympho-adenoma and lympho-sarcoma, some considering them essentially the same and others that they were essentially different He agreed rather with the latter view and he considered the specific inflammatory origin of the disease indubitable, although the specific agent had not yet been found He suggested that in all cases of general glandular enlargement careful microscopical and bacteriological examination of the blood should be made and that excision of a gland should be practised for inoculation experiments This course was adopted in his cases and led to the diagnosis of lympho-sarcoma being made which was borne out by the rapid course of both cases, death occurring in one case in nine months and in the other in four months —Dr Barendt showed a servant girl, 20 years of age, with Leucoderma Colli who had acquired syphilis six months previously He drew attention to the long duration of this syphilide and the importance of examining the neck in suspected cases of syphilis

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY —A meeting of this society was held on March 9th, Dr James Murphy being in the chair The following cases and specimens were shown —Dr W Robinson A boy aged 11 years who for the past six years had complained of Pain and Swelling of the Big Toes and who nine months ago showed great difficulty in walking upstairs At the present time the pseudo-hypertrophy was limited to the calf muscles and infraspinati the quadriceps, glutei, deltoids and chest muscles being wasted —Dr Macdonald A man, aged 44 years, upon whom had been performed eight months ago the operation of Total Excision of the Upper Jaw for antral carcinoma Two months previously to the operation the patient had two teeth extracted and when seen later fungoid growth was presenting through the sockets Although the orbital plate had been removed there was no dropping of the eyeball and only very slight deformity —Dr James Drummond Unreduced Fracture and Dislocation of the Elbow in a man, aged 50 years, who had 20 years previously fallen down a ship's hold Some weeks later he had been admitted into hospital in Philadelphia where several pieces of dead bone came away Two years later he was able to resume work and he now presented a most remarkable deformity but he had a very useful elbow with fair range of movement —Dr Page 1 A man aged 26 years, who four months ago had undergone operation for the extirpation of a Varicose Aneurysm of the Femoral Artery in Hunter's canal A portion of both artery and vein was removed Details of the case had been reported at the December meeting last year 2 A woman upon whom he had recently operated for Gall stones Several stones were removed from a contracted gall bladder and one large stone in the cystic duct could only be removed after extending the gall bladder incision along the cystic duct to the site of the stone The gall bladder was accurately sutured and the abdominal wound was closed without drainage 3 Removal of Malignant Growth in the Neck together with the Pneumogastric Nerve This patient two years previously had his tongue removed for epithelioma and nineteen months later he returned with recurrence in the cervical glands. At the operation for their removal a portion of the pneumogastric nerve was excised without bad effect 4 Sarcoma of the Meninges This patient, aged 57 years, three years ago received a severe blow on the top of the head resulting apparently in fracture of the base of the skull Nine months ago a soft point over the vertex was discovered into which a finger might be inserted A swelling gradually appeared under the scalp without signs of intracranial pressure A fortnight ago an exploratory incision revealed a very vascular growth springing from the meninges and presenting through a distinct orifice in the cranial vault.—Dr David Drummond 1 Three patients with Musical Heart Murmurs In discussing their time in the cardiac cycle, contrary to general statement, his experience went to show that such murmurs were far more frequently regurgitant than direct In reviewing their pathological import he was of opinion that they indicated good compensation, and as compensation failed the musical character of these murmurs disappeared 2. A specimen of an Aneurysm of the Aorta which had ruptured into the superior vena cava. The patient had been shown at a previous meeting of the society as suffering from the above condition and the specimen exhibited proved the correctness of the diagnosis —Dr J V W Rutherford A specimen of a Uterine Fibroid with a Broad Ligament Cyst —Dr Cottew Moore A card specimen showing Congenital Pigmentation of the Retina

ÆSCULAPIAN SOCIETY OF LONDON —A meeting of this society was held on March 24th, the President, Mr D H. Goodsall, being in the chair —Mr F Hewitt Oliver showed a well-grown young woman whose Left Forearm had been Amputated in Utero At birth the stump was unhealed and "the bone was bare and discharging" There was a length of five centimetres of forearm and in it was no radius —Mr E C Hearne showed a man, aged 50 years, previously in good health, the subject of Acanthosis Nigricans of six months' standing The spines were scattered over the skin as a whole, luxuriating in the axillæ, and around the anus forming thick masses extending externally five centimetres, the hard palate and buccal mucous membrane were in part affected similarly, the soles were blue and horny and the nipples were much affected by the horny coloured skin growth Thyroid treatment only reduced the general health of the patient — A deputation of the proposed Central Hospital Board for London attended to ascertain the members views In the course of Sir Arthur Clay's speech he said that in 1897 1,500 000 out-patients attended the London hospitals which translated was that 25 per cent of the people of London paid nothing or ridiculously little for medical treatment This should mean that this percentage of her population was destitute which was obviously untrue Hence money which should come to the general practitioner did not come Inquiry at the hospitals could not be effectual to check abuse, hence the need for some other system —Mr Loch, the honorary secretary of the Charity Organisation Society, put the question, Was it good or bad that "outs" should attend as now paying little or nothing and did the present system of crowding to the out departments financially injure general practitioners? He advised that in the new scheme members of friendly societies should have a first claim on the out-department and that trained women should be employed to find out the money position and deserts of applicants He wished to prevent by every means pauperising and pauperism and to relieve the needy permanently if need be —Colonel Montefiore put the question, Did the existing state of the out-departments tend to lower the status of the general practitioner by the low charge made at hospitals when any thereby tempting some of the number to make debased charges?—All the members present agreed that there was abuse of the out-patient department and sympathised with the views and efforts of this proposed board

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY —A meeting of this society was held at Sheffield on March 17th, the President Dr Donald, being in the chair —Dr Keeling showed the following specimens. (1) Large Cystic Myoma of the Uterus, (2) Dermoid Cysts of both Ovaries, and (3) Tubo-ovarian Cyst an Ovarian Hydrocele —Dr Farell related a case of Cancer of the Cervix associated with Three Months Pregnancy The uterus and its contents were successfully removed by vaginal hysterectomy —The President reported a case in which he had performed Vaginal Hysterectomy for Post-partum Hæmorrhage The patient, a primipara, was observed during pregnancy to have an extremely thin uterine wall. Labour came on spontaneously, accompanied, however, by extreme inertia and was completed by forceps Profuse and intractable post-partum hæmorrhage ensued continuing in

splendid results and observed that there seemed to have been unusually little involvement of lymphatic glands in his cases considering the size of the tumours He thought the end to-end approximation of the stomach and duodenum as practised by Mr Morison was better than the method employed in Germany of closing the cut end of both organs and then making a lateral opening between the two Mr Spencer had performed pyloroplasty successfully, but he preferred to pass his sutures only through the peritoneal and muscular coats, using a Lembert s suture of fine silk and an ordinary round sewing needle He thought that gastro-enterostomy was of great service in cases where excision was impracticable

Dr RADCLIFFE CROCKER described a case, and showed coloured drawings, of Lymphangeioma Tuberosum Multiplex The patient was a woman, aged 30 years who had first noticed the lesions at the age of 18 years There was a large number of small, smooth, papular elevations on the skin over the upper part of the chest They were most abundant under the clavicles and without any definite arrangement although there was a tendency for them to follow oblique lines from the shoulders to the sternum They were confined to the upper part of the chest with the exception of a few outlying papules on the neck and in the axillæ Some of them were yellowish or brownish but others were of the same colour as the surrounding skin There was mitium between the spots and on some of them Microscopically they had a cystic structure with some glandular elements The patient was in robust health and there was no inconvenience from the spots beyond their preventing her from wearing low necked dresses The condition was a rare one, only 10 cases having been recorded

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NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY — A meeting of this society was held on March 15th, Mr T Davies Pryce, President, being in the chair —Mr Tresidder showed a patient from whom he had removed the Lower Six Inches of the Rectum by a modification of Kraske's method, dividing the sacrum at the level of the third piece and removing the lower portion of it and the coccyx —Mr A R Anderson showed a patient after operation for a Perforated Gastric Ulcer The operation was done about six hours after perforation and recovery was uneventful The ulcer was situated on the posterior wall of the stomach, near the lesser curvature and close to the œsophageal opening It was of a size admitting the index finger tip The peritoneum was soiled with some milky fluid which must have reached the general cavity through the foramen of Winslow, as the ulcer had perforated into the lesser sac of the peritoneum and was reached after tearing through the small omentum and sutured —A discussion on Gastric Ulcer, with special reference to the Diagnosis of Perforation, was opened by Mr R C Chicken, Mr A R Anderson, and Dr Noble Mr Chicken remarked upon the great number of symptoms which by one author and another were laid down as occurring in perforation of a gastric ulcer Regarding the ulcer itself and the diagnosis of it, the three cardinal symptoms were (1) pain, (2) vomiting, and (3) tenderness, although one of these might be absent In Mr Chicken's opinion vomiting of blood was nearly always present In respect of the diagnosis of perforation the chief points were—(1) previous history, with a history of vomiting of blood, especially of the "coffee grounds" variety, (2) sudden onset, and (3) general abdominal pain —Mr A R Anderson spoke chiefly in relation to treatment and described two cases In the first case an operation was performed for perforation and all went well for a time, but subsequently a subphrenic abscess developed which ultimately proved fatal There had been great soiling of the peritoneum in this case with solid material and the probable cause of the abscess was the lodgment of a portion of this on the upper surface of the liver The abscess was situated posteriorly at the position of the reflection of the peritoneum on to the diaphragm Mr Anderson insisted upon the great importance of cleansing this situation as a routine practice in such cases and remarked that it was often neglected A second case was related in which a small, round, deep, conical ulcer was excised before closing the perforation The result was completely successful and in such cases Mr Anderson advocated excision rather than simply closing the perforation Referring to the operative treatment of non perforated ulcers Mr Anderson remarked on the encouraging results which had been reported by writers, chiefly continental He considered that in some cases it was the right course to adopt —Dr Noble confined his remarks to the diagnosis of perforation and considered that the following were the signs of chief importance (1) sudden pain, (2) immobility of abdominal walls, (3) rapid distension, (4) resonance, replacing liver dulness, (5) friction sounds to be heard with the stethoscope and indicative of commencing peritonitis, (6) previous history of vomiting, bearing in mind that in 50 per cent there is no history of hæmatemesis obtainable, and (7) the pulse, and to this condition he attached very great importance —The President spoke, relating a case in which there was no reasonable doubt that a perforation had occurred in the gastric ulcer Operation was proposed but the patient declined and recovered —Similar cases were related by Dr Hunter and Dr Giddings —The discussion was continued by Mr Tresidder, Mr Blurton, Dr Mutch, and Dr Bolton —The following resolution, which was proposed by Dr, Giddings, and seconded by Mr Geraty, was carried unanimously "That in the opinion of this society the National Society for the Prevention of Consumption and other Forms of Tuberculosis is worthy of support and that the formation of a local branch would be advantageous"

BRITISH GYNÆCOLOGICAL SOCIETY —A meeting of this society was held on March 23rd, the President, Dr Macnaughton-Jones, being in the chair —Mr C Ryall showed three specimens of Uterine Myoma removed by Abdominal Hysterectomy —Dr Winson Ramsay (Bournemouth) showed (1) Two Uteri removed by Vaginal Hysterectomy, (2) Uterus removed by Panhysterectomy, (3) specimen of Tubal Abortion, and (4) a Modified Broad Ligament Needle —Dr James Oliver exhibited a photograph of Fibroid of the Ovary with extensive Localised Extravasation of Blood under the Capsule of the Tumour — In the discussion on these specimens the President, Dr E A Purcell, Dr Heywood Smith, Dr Herbert Snow, Dr R H Hodgson, Dr Arthur Giles, Mr Ryall, and Dr Ramsay took part —Dr James Oliver read a paper on a case of Adenoma Universale of the Endometrium in which panhysterectomy by the abdominal route had been performed A photograph of the interior of the uterus was exhibited and this showed myriads of more or less pedunculated growths varying in size from that of a pea to that of a walnut springing from the mucous membrane of the cervix as well as from the body of the uterus The patient who was but 34 years of age was a virgin and the symptoms which were referable to the disease had existed for 10 or 12 years Dr Oliver did not consider that the disease should be termed, as it had hitherto been, "adenoma malignum" He drew attention to the fact that the lining membrane of the cornua uteri in horned ruminants showed upheavals which resembled closely the more or less polypoid growths which characterised adenoma universale in the human female and he suggested that this disease might be due to a reversion of type

LIVERPOOL MEDICAL INSTITUTION —A meeting of this society was held on March 23rd, the President, Dr Macfie Campbell, being in the chair —Mr Banks showed three cases in which he had operated for diseases of the jaws The first case was that of a middle aged female who had suffered for three years from an epulis connected with an upper left molar tooth The growth involved the whole of the left side of the hard palate and alveolar margin It was removed together with the alveolar process by an incision through the cheek from the angle of the mouth The cavity left had been fitted with a denture and the speech and mastication of the patient were now perfect The second case was that of a middle aged man who had 12 years' history of a growth of the hard palate Three attempts had been previously made elsewhere to remove it The operations appeared to have irritated it into a rapid growth doubtfully malignant The whole of the hard palate and alveolar process of the upper jaw were removed A plate with teeth had been fitted with perfect result as regarded speech and mastication The third case was that of a young man, aged 18 years, who had bony ankylosis of the tempero maxillary articulation following inflammation after the removal of teeth The right condyle was removed and the left coronoid process and the neck of the left condyle were chiseled through He now had perfect movement —Dr MacLeod Ross read notes of a rapidly fatal case of Acute Spleno-medullary Leukæmia which occurred in a primipara, aged 27 years, a fine well built woman who had been confined five weeks previously The case progressed rapidly without any particular complication except persistent diarrhœa and terminated fatally from asthenia 97

sional occurrence of stripes on pure bred horses has been often noted The author himself brings forward a striking instance of a Norwegian pony which showed many face stripes and which "never had the opportunity of even seeing a zebra." So incidentally the Mrs Betsy Prig like stories of prenatal influence on the mother are at least not always demonstrable. Further than this, some of the examples which have been collected as to striping in horses show a likeness not merely to zebras in the rough—that is, to a striped equine animal—but to the mountain zebra in particular

In genuine zebra horse or zebra donkey hybrids it is not clear that the stripes are absolutely traceable to the striped parent. Reversion is here too apparent, and in any case "the most zebra like in form are utterly unlike their sires in their markings" It is well known that in hybridisation between many and varied kinds of animals the same phenomenon is met with Indeed, the greater mixture of tendencies which would be obtained by the crossing of two species is obviously greater than that which would result from the pairing of two individuals of the same species Hence the greater probability of the discovery in the offspring of some ancestral trait Unfortunately hybridisation is very limited in its range or some hint of the common ancestors of now remote groups might be arrived at from such experiments Professor Ewart has rendered a very great service to the advance of our knowledge of the interesting problems here only too briefly alluded to It is much to be hoped that he will continue with equal energy this exceedingly important line of research We may remark, in conclusion, that the facts put forward are illustrated by copious and clear illustrations and that the style is eminently pleasant and intelligible

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The Effects of the Factory System By ALLEN CLARKE London Grant Richards 1899 Pp 178 Price 2s 6d

THE volume before us brings under consideration in realistic form the conditions of daily life existing among factory operatives, especially in Lancashire, with which the author is well acquainted from having taught in a public elementary school in a cotton town Such an account as is here afforded and the vivid pictures drawn from the life by one who has lived and worked among the people demands respect and makes us reconsider the cost of the factory system to humanity The book is opportune when an Education Bill is before Parliament containing a clause on the special item as to half-time workers among children of school age Probably there is more general agreement of opinion among the public as to abolishing the half-timers' factory certificate for children under 13 years and raising the age of school exemption to 14 years than upon the other changes which the author would like to see introduced. It is a well-established principle that while the body and brain are rapidly developing it is necessary to the full evolution of manhood and womanhood that the environment should be favourable to physical and mental growth, the child should be childlike, his spontaneity of brain action needs to be trained and not crushed by the monotony and drudgery of labour if he is to gain full power and avoid being dwarfed in his riper years Low wages, augmented by the child labour of our future operatives, do not promise well for future intelligent work in any industry, and it seems that much of the cotton spinning formerly carried on in Lancashire is now leaving the country, according to the figures quoted the export of cotton goods is declining, while in 1896 manufactured materials to the value of £1 040,748 were imported. These facts suggest that improved skill might be remunerative and compensate the loss of child labour. This question involves the interests of many for the number of half time scholars on the register in 1892 amounted to 172,363 for England and Wales Sir John Gorst pointed out to a deputation at the Education Department who urged raising the school age and the abolition of half time exemptions with limitations of child labour in other directions, that though such action is undoubtedly desirable and to the public interest yet it is necessary first to win the opinion and acquiescence of the operatives themselves who in too many cases, it may be feared desire to gain money by the labour of their wives and children rather than seek their real well being with the accompaniments of a well-ordered home and thriving, well trained children Demonstration is the best teaching, an inquiry as to the physical and mental status of children seen individually in selected schools with their subsequent classification under age and sex as "full scholars" and "half timers" would afford accurate demonstration of the differences between them tending to convince both the public generally and the operatives, as well as indicate the loss and profit of child labour Northern factory workers are not an unintelligent set of men and with the facts before them they might be ready to make a just demand for the true interests of their wives and children and their class Besides questions concerning factory children and their education the book deals with inspection and the social surroundings under which labour is carried on, it is to be wished that the author had been able to make practical suggestions for reform Much might be done in our manufacturing towns by the improvement of artisans dwellings and the means of transit, while the smoke nuisance question remains to be solved

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LIBRARY TABLE

Poison Romance and Poison Mysteries By C J S THOMPSON London The Scientific Press Ltd 1899 Pp 255 Price 6s —This work is written in a popular style and makes no pretence of being a scientific manual Mystery and crime have a peculiar attraction for some people—that is to say in theory—and therefore they read with avidity any book which treats of these subjects, be it history or fiction Mr Thompson's book deals with poisoning solely from a historical point of view, relating cases which have actually occurred from the earliest times until the present. The first five chapters refer to the poisons of antiquity, royal and historic poisoners and professional poisoners Brief reference only is made to the methods employed by poisoners during mediæval times and we think that Mr Thompson has rather lost an opportunity in not enlarging on this theme In relating the more modern famous cases of poisoning however, the author has succeeded in collecting together much that is interesting, although the subject matter naturally deals with the sordid side of humanity and reveals characters calling forth the greatest aversion. Arsenic has perhaps been more frequently used than any other poison for criminal purposes and it naturally receives a large amount of attention from Mr Thompson The strange case of Madame Lafarge the case of Madeline Smith, and that of Mrs. Maybrick are duly detailed The chapter in which aconite is referred to is chiefly interesting from an historical point of view, although of course the Lamson case is described Antimony again has been used as a poison in many notable cases and the "Bravo Mystery" and the case of Dr Pritchard are chosen as examples The main point of the chapter on Strychnine Poisoning is occupied by the Palmer case, only a very brief account being given of the case of Neill Cream and that of Horsford. This is to be regretted as every medico legal text book contains a full account of the murder of Cook by Palmer, whilst the other two cases mentioned are of a more recent date and would have made the book now under consideration more valuable for reference As we have remarked, however, this is not a purely

spite of all the usual methods of treatment, including plugging with gauze The patient was apparently moribund when seen, but it was decided to perform vaginal hysterectomy as a last resort The operation was easily carried out, not occupying more than ten minutes, clamps being used for the broad ligaments The patient temporarily improved but died an hour later The President was of opinion that if the operation had been performed a few minutes earlier the patient's life would probably have been saved —Dr W K Walls introduced for discussion the subject of the Treatment of Some Cases of Accidental Hæmorrhage, adjourned from the last meeting In these cases Dr Walls advised that the membranes should not be ruptured until the cervix was fully dilated or dilateable There was no objection to plugging the vagina, especially if used in combination with a hydrostatic dilator such as De Ribes s bag After delivery by forceps or version the great risk to the patient was from the almost inevitable post partum hæmorrhage If the usual methods such as ergotin, kneading, compression, and gauze packing, failed he advised vaginal hysterectomy The operation could be rapidly carried out and he believed that in this way certain cases could be saved —Dr Glynn Whittle in an experience of 10,000 labours had met with severe accidental hæmorrhage in 16 cases All the infants died with one exception, but 15 of the mothers recovered He had never used hydrostatic dilators but preferred to plug the cervix and vagina firmly and to follow this by manual dilatation of the os uteri, effecting delivery by forceps or version The post partum hæmorrhage was in his experience always controlled by a very hot uterine douche He was not in favour of vaginal hysterectomy or Porro s operation in such cases, believing that if a woman could survive these procedures she would certainly be saved by a vigorous application of the above principles of treatment —Dr J W Martin considered that the cases of very severe accidental hæmorrhage as described by Dr Walls must be of very great rarity, but in such cases he agreed that vaginal extirpation was justifiable if all other methods failed to check the post-partum bleeding —Dr Len suggested that in cases of severe internal bleeding into the uterus associated with an undilated os and extreme inertia *accouchement forcé* by free incisions into the cervix should be carried out —Remarks were also made by Dr Briggs, Dr Keeling, and the President and Dr Walls replied

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND —An ordinary meeting of this society was held at 20, Hanover square on March 22nd, the President, Dr Radcliffe Crocker, being in the chair —Dr T D Savill showed a case for diagnosis, a female with an Eruption which he believed to be Lichen Ruber Planus A well marked bulla was observed at one spot, she had been taking arsenic —Dr J H Stowers showed a case of Sclerodermia in a young woman There were symmetrical morphœic patches on both arms, both legs, and on the fronts of both thighs In the discussion it was authoritatively stated that up to the present no structural nerve changes had been observed in these cases either in the central or any other parts of the cord or in the peripheral nerves —Dr A Eddowes showed a case of Generalised Lichen Ruber Planus in a boy aged six years —Dr Abraham showed two cases of Dermatitis Herpetiformis in men One patient was about 70 years of age He also showed two members of one family, a boy and a girl, with Erythema of the Extremities In the girl both legs and both feet were affected (? Bazin s legs), in the boy the nose was the only part affected —Dr Travers Smith showed a case of Lupus Erythematosus (?) in a female, aged 23 years One cheek, both ears, and the fingers were affected —The cases were discussed by the President Dr Abraham, Dr Eddowes, Dr Galloway Dr Savill Dr Phillips-Conn, Dr Rafenacht Walters, Dr Travers Smith, Mr Pernet, and Dr Stowers

BRISTOL EYE HOSPITAL —The 88th annual meeting of the friends of this institution was held on March 22nd under the presidency of the High Sheriff (Mr C Wills) The report showed that 5282 new cases had been treated during 1898, 421 cases had been admitted, being an increase of 28 as compared with 1897 The number of out-patients exceeded that of any previous year The financial statement showed a deficiency on the year of £228 It was decided to add an extra storey to the building which will permit of the erection of a new operation theatre, together with increased accommodation for in patients and for the resident staff The cost is estimated at about £4500

Reviews and Notices of Books.

The Penycuik Experiments By J C EWART, F R S London Adam and Charles Black 1899 Pp xciii, 177 Price 10s

THE account of Professor Ewart s experiments set forth in the present volume should prove of interest to more than one class of readers The whole question of hybridity and the mysterious phenomena of telegony (as some think them) are of the greatest importance to the zoologist, while both the breeder and the veterinarian cannot fail to glean much of moment to their own occupations from what Professor Ewart has to say It is with the purely scientific aspect of Professor Ewart's investigations that we shall deal in the present notice of his book The book is pervaded by the question of telegony, not in the least that the author has adduced any reasons—any further reasons—for accepting this view of some phenomena of hybridism, but because, in his opinion, some of those alleged phenomena are to be explained in quite a different fashion—in fact, by reversion to an ancestral form Telegony itself seems to date practically from the notorious rather famous experiment of Lord Morton and the author deplores the "damnable iteration" with which this distinctly dubious experiment has been offered to the scientific public In spite of the frequency with which this experiment has been quoted it will perhaps make matters clearer if we give the briefest account of what it was, for the statement will prove a convenient text whereon to build up some account of Professor Ewart's own contributions to the matter In 1820 Lord Morton wrote a letter to the President of the Royal Society (which is given *in extenso* by the author of the volume before us) in which he detailed some experiences with a mare of which the gist is this a male quagga was put to a seven eighths Arabian mare and a hybrid of intermediate characters was produced The mare was then impregnated by another owner with a black Arabian horse, the offspring in this case had a "striking resemblance to the quagga" Now the occurrence of actual genuine telegony is conceivable for two principal reasons, of which the last to be mentioned is better because more intelligible than the first This first is the somewhat mystical view held by several naturalists that the sperm of the previous sire penetrating, it is to be supposed, as far as the ovary modifies profoundly the female sexual cells This is, of course sheer hypothesis, criticism of the assumption is far easier than to support it in any way The second view is perhaps the actual living of the spermatozoa for a long period in the female passage which then, by virtue of prepotency, fertilises an ovum in preference to the sperm of a second sire The facts well known to occur in many hymenopterous insects are an argument in favour of this way of regarding the matter The females of many of these are fertilised in the summer or autumn, the sperm is stored up in receptacles where it lives through the winter to come into contact with an ovum the following spring A far better way out of the difficulty raised by the facts of hybridisation is, however, the view urged by many, including Professor Ewart For them there is no such thing as telegony the phenomena appearing to be of that nature are really due to ancestral traits arising in the offspring 'When I first saw Agasse's drawing of the quagga hybrid (of Lord Morton) observes Professor Ewart, "I was surprised at the meagreness of the striping In all my hybrids there are more stripes than in their zebra sire

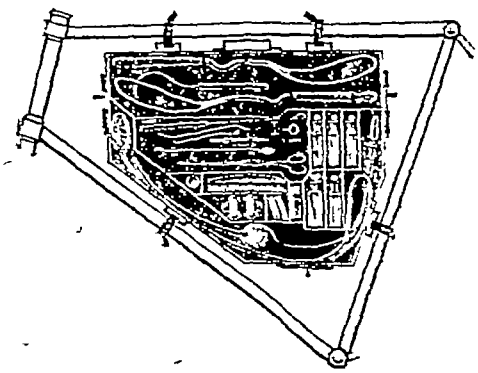
I have had in my possession horses with more stripes than are represented by Agasse in Lord Morton s quagga hybrid and hence it would be difficult to prove that this hybrid was not indebted to its ancestors on the female side of the house for all the stripes it possessed ' The occa-

M B., of Toronto, which gives an excellent *resume* of the work done in this department of medicine during the last few years, and the second is an article by Henry L Swain of New Haven, Connecticut, on the Detection of Foreign Bodies within the Eyeball, showing that much may be done to determine the presence of a foreign body in the eye by a careful observer without the employment of the x rays

New Inventions.

AN ASEPTIC OBSTETRIC CASE

THIS case has been constructed by Messrs Reynolds and Branson, Limited, of Leeds, at the suggestion of Mr Herbert Rowe, M R C S Eng It is made throughout of block tin, it is unlined and as far as possible the corners inside have been rounded off to increase the ease with which the interior may be cleaned The instruments, &c are held in position by metal partitions and clips and (if the bottles are removed) the case with its contents *in situ* may be boiled or sterilised in any other convenient way Its shallowness (one and seven sixteenths of an inch) and general shape allow it to be carried on a bicycle but it is equally conveniently carried in the hand Its outward form can, however, be made



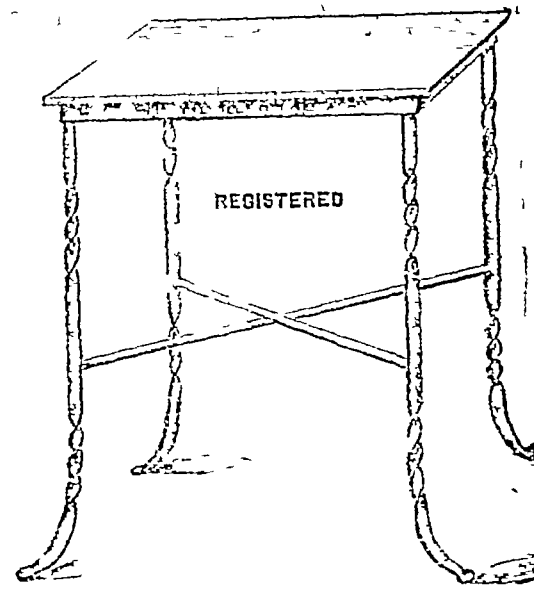
to suit individual ideas, but it is suggested, for ease of cleaning, that the depth should not be materially increased The list of instruments which it contains can be added to or diminished according to requirements The case illustrated contains five bottles and 14 instruments (including full sized forceps and a transfusion apparatus)

VACCINATION APPLIANCES

THE "Vaccination Set manufactured by Messrs Brady and Martin of Newcastle-on Tyne is a complete collection of requisites neatly packed in a small mahogany box measuring six and a half inches by two and five-eighth inches by two and a half inches. It consists of (*a*) a lamp and boiler for sterilisation (*b*) two steel vaccinators, (*c*) three glass tubes, numbered, for holding tubes of lymph, (*d*) blower for ejecting the lymph, (*e*) glass plate, and (*f*) one tube of carbonate of soda tablets and one tube of perchloride of mercury tablets The blower is an indiarubber ball, about an inch in diameter, connected with the tube of lymph by means of a very slender indiarubber tube The boiler is a nickled metal cylinder three and a half inches high and one and three quarter inches in diameter Each of the vaccinators is three inches long sharpened and pointed at both ends a state of matters requiring great care on the part of the operator lest he wound his own fingers with the end not in use. It would also be easy to pack the vaccinators somewhat differently in the box so as to give better protection to their points For sterilisation they are hung on wires in the boiler Practitioners will find this vaccination set decidedly convenient

IMPROVED ASEPTIC TABLE

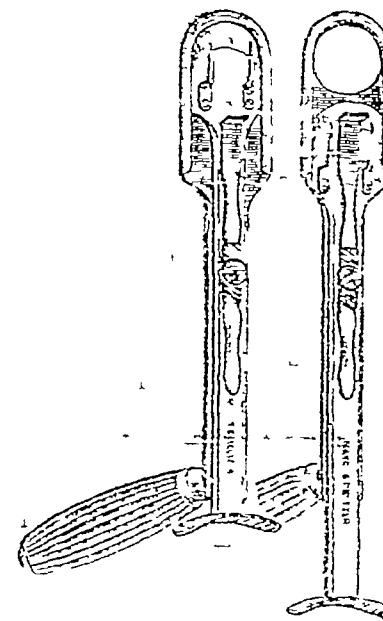
THE accompanying illustration shows a new registered aseptic table specially designed to take the small cabinets which were introduced by Messrs Arnold and Sons last year. It can also be used as a ward or instrument table if desired.



It is very cheap and is made of iron enamelled white in two sizes, 20 in by 14 in and 18 in by 11½ in The manufacturers are Messrs Arnold and Sons of West Smithfield, E C

A NEW TONSIL GUILLOTINE

THE advantages of this tonsil guillotine are the following 1 The two prongs attached to the back of the knife-blade transfix the tonsil and prevent its falling into the pharynx, a matter especially important when the patient is under an



anæsthetic 2 Owing to the centre-piece of steel which helps to keep the blade on the slide, having its forward end turned up at right angles the act of drawing back the blade for excision of the second tonsil ejects the first from the

professional work and does not require the same amount of criticism The facts are simply given and the gruesome and unnecessary details are omitted

Professor Hieronimus A Novel by Amalie Skramm Translated from the Danish by ALICE STRONACHI and G B JACOBI London John Lane 1899 Price 6s —It has hitherto been the boast of the people of these islands that they owed most of their grit and powers of endurance to the strain of Scandinavian blood brought in by successive invasions of Danes and Normans If, however, the modern Scandinavian and Danish peoples are of the type depicted by Ibsen and the author of this book—and we cannot believe that such is the case—they must have sadly degenerated Hedda Gabler, Nora, Mrs Solness, and the lady who so delicately reproved her husband for not taking what she euphemistically called "champagne" when she offered him the chance are a sad descent from the people of the Sagas "Professor Hieronimus" is the story of a lunatic asylum, to which place, in Denmark apparently, a husband can consign his wife "as soon as he and a doctor say that she is mad" The sign of madness in the wife in this story seems to have been that she came to the conclusion that she could not paint pictures Were this form of madness more common the exhibitions at picture galleries would be less painful Her husband consulted with a medical man who was a weak creature and they agreed that she must go into an asylum for rest She went of her own free will and the main portion of the book is taken up in describing her experiences there Danish asylums for rest must be curious places Acute and chronic cases are all mixed up together and although the patients have separate rooms the doors are never allowed to be shut This, naturally, rather tried the lady—her name was Else—who came to the establishment for rest, for this was the sort of thing which happened "Soon after a creature in a chemise and a short night-jacket, with knees bent almost in a sitting posture, came with unnaturally long strides, violently waving her arms, and darted past the door Fru Syverts in the next cell began shrieking and hammering on the door " Else's chief sorrow was that they took away her garters, fearing apparently that she would follow the example of the bereaved lady in the ballad—

> "A captain bold of Halifax who lived in country quarters
> Seduced a maid who hanged herself one morning in her garters.
> Oh, Miss Bailey, unfortunate Miss Bailey"

They supplied Else's wants with a piece of string, but one blissful morning she got her garters back and Hieronimus came in "'Well, now you have got your garters,' he began in a low, soothing tone 'Do you want them back?' Else answered in cutting tones 'N-o,' said Hieronimus, with a deprecatory wave of the hand " Finally Else was removed from this asylum to another and there the book ends Seriously we do not think that lunacy or, for the matter of that, any other form of disease is a fit subject for fiction, and with reference to the behaviour of the husband and the doctor, as Hedda Gabler in one of her sane moments remarked, "People don't do such things"

Marshall and Hurst's Practical Zoology Fifth edition Revised by F W GAMBLE, M Sc London Smith, Elder, and Co Crown 8vo 1899 10s 6d —A new edition of this well known and widely read text-book does not need much comment, that it still retains its popularity is shown by the publication of five editions since 1886 Mr Gamble has, however, still further contributed to the usefulness of the work by re arranging the order of the chapters on technique, adding where necessary with a hand showing the experience of the practical teacher This is specially noticeable in the chapters on the Methods of Killing Animals, on the Use of Hardening and Staining Reagents, and in the directions for mounting sections cut in paraffin A short chapter is now devoted to Drawing with the Camera Lucida A more correct account also is given of the cranial nerves of the dogfish Mr Gamble describes a buccal branch of the seventh or facial nerve, which is given off from the main stem on entering the orbit together with the palatine and hyoidean branches, and in his treatment of these nerves small additions are made here and there which considerably simplify their relative positions We commend the changes to which we have alluded

JOURNALS

The Journal of Physiology Edited by MICHAEL FOSTER, M D, F R S, and J N LANGLEY, Sc D, F R S Vol xxiv, No 1 March 22nd, 1899 London J Clay and Sons Price 6s —The articles contained in this number are 1 O A MacMunn, M D Dub The Pigments of Aplysia Punctata (with two plates) The pigment named "aplysiopurpurin" is extremely unstable and appears to vary with the species 2 Wakelin Barratt, M D Lond Further Observations on the Elimination of Water and Carbon Dioxide by the Skin Dr Barratt shows that the elimination of water by the skin is reduced in quantity to about 78 per cent of the normal output but is not abolished by varnishing it In dry inflammation a similar reduction to about half the normal output occurs, the diminution in both cases being due to a mechanical blocking of the sweat ducts The elimination of carbon dioxide is essentially a single process—viz, that of diffusion through the horny epidermis 3 J Lorrain Smith, M D Edin The Pathological Effects due to Increase of Oxygen Tension in the Air Breathed These researches are of much interest to all those who employ workmen in laying the foundations of bridges or in other underground work where they are exposed to great pressure At the pressure of four atmospheres the limit of the toxic action of oxygen is nearly approximated The experiments of Dr Lorrain Smith have also a bearing on the general pathology of inflammation since they show that an inflammatory condition of the lungs is in a sense directly continuous with the normal process of respiration 4 Noel Paton, M D Edin Some Observations on the Mode of Conversion of Glycogen to Glucose in the Liver 5 W Hale White, M D Lond, and F Gowland Hopkins, M D Lond On the Excretion of Phosphorus and Nitrogen in Leucæmia 6 W Edgecombe, M D Lond, and W Bain, M D Durh An Abstract of Observations on the Effect of Baths, Massage, and Exercise on the Blood pressure They show that cold water baths raise arterial pressure and lower venous pressure After reaction the opposite obtains Percussion added to cold aids the rise in arterial pressure Hot immersion baths lower arterial and absolutely and relatively venous pressure Saline warm baths lower arterial pressure to a greater extent than pure water baths at the same temperature, and venous pressure, though absolutely lowered, is relatively raised These effects are more marked if the water be, as at Nauheim, effervescent 7 P Botazzi, M D Florence, and O F F Grünbaum, D Sc Lond On Plain Muscle (with 20 figures in the text)—an interesting research giving the tracings obtained from unstriated muscle derived from various sources 8 J L Bunch, M D Lond On the Vaso-motor Nerves of the Small Intestine (with 26 figures in the text) The author shows the effects of stimulation of various nerves and the influence of several drugs, as nicotine, ergotin, croton oil, coniin, piperidine, and eserine

Yale Medical Journal Vol v, No 4 February, 1899.—This number contains two well written articles The first is an Address on the Progress of Neurology delivered before the Yale Medical Alumni Association by Llewellyn F Barker,

THE LANCET.

LONDON: SATURDAY, APRIL 1, 1899

THE resignation of the honorary medical and surgical staff of the *Dreadnought* Seamen's Hospital at Greenwich affords a remarkable illustration of the results of the mismanagement of the affairs of a hospital which must occur sooner or later when it is solely under the control of a lay committee and when there are no members of the medical or surgical staff (consulting or visiting) on the committee. The visiting staff which does the work of the hospital and supervises the well being of the patients is kept in ignorance of important matters of policy and even of points of detail with regard to which it is of the utmost value to the proper administration of the hospital that it should be at once informed and should be able to express its opinion. With a medical staff represented on a committee it would be impossible for that committee to initiate and carry out such a discourteous line of conduct as that which the present committee of management of the *Dreadnought* Seamen's Hospital has thought fit to adopt towards its visiting staff. The facts have been fully published and commented on in THE LANCET and in other papers and will be quite familiar to our readers. We need therefore now only summarise the chief features which have been brought out in the controversy.

A scheme for the establishment of a school of medicine for tropical diseases was suggested by Mr. CHAMBERLAIN and was under consideration by the hospital committee for some considerable time and although the physician to the Branch Hospital (who is also the medical adviser to the Colonial Office but a junior in standing) was consulted, the members of the senior visiting staff of the *Dreadnought* were never, individually or collectively, asked for their opinion. The committee do not see that there is any "want of courtesy" in this procedure. We think that the medical profession will hold a very different opinion from that entertained by the committee. On July 11th of last year Sir HENRY BURDETT published a letter in the *Times* giving the details of a fully matured scheme for the new school and the extension of the Branch Hospital, and appealing for public support, his letter contained the statement that "the teaching staff will consist of the senior medical staff of the *Dreadnought* Hospital at Greenwich," &c., whereas that staff did not know that any such scheme was even being contemplated. Sir H. BURDETT subsequently said that his letter was written under instructions from the committee of the *Dreadnought* Hospital so that he repudiates any personal responsibility for the statement. The visiting staff wrote to the *Times* to point out that this statement was made without their authority or consent. A long and somewhat bitter correspondence then ensued, inasmuch as no apology or expression of regret was forthcoming from the committee for its lack of courtesy in not consulting the visiting staff. We understand that no apology has even yet been offered to the staff. A memorandum full of controversial and incomplete statements, which was published in a contemporary in December last and which should evidently have been sent to the visiting staff, merely intensifies the lack of courtesy. The staff therefore could do nothing but resign, as it was impossible for them any longer to carry on the work of the hospital under such circumstances. Moreover, the value of the appointment has been seriously diminished. Cases from the Victoria and Albert Docks are to be concentrated at the Branch Hospital and not to be conveyed across the river as in the days when the Branch Hospital was founded, and so the parent hospital is to be largely deprived of its historic cases and turned into a sailors' infirmary or asylum.

The judgment of the heads of the profession on the conduct of the committee of management is on record. Sir WILLIAM BROADBENT in a letter published in the *Times* of Dec. 7th sums up his objections to a memorandum and appeal for public monetary support, which were sent to him by the committee of management, in the following forcible paragraph: "A committee capable of such a suppression of truth material to the issues and of such a suggestion of what is calculated to mislead is, in my opinion, totally unworthy of confidence." The Royal College of Physicians of London has twice refused to take part in the carrying out of the scheme notwithstanding the appeals of the committee of management who plaintively plead, when they give no answer to the questions asked by the visiting staff, that they object to being so catechised. The Royal College of Surgeons of England has withdrawn its representative. A school of tropical medicine, or even more than one, will be of great advantage to Englishmen who intend to practise abroad, but it is much to be regretted that this one is started on a narrow and personal basis instead of being founded on lines approved by the official bodies representing the profession and thus securing their hearty coöperation and support. Moreover, we are sorry to see that the students of the Liverpool School of Tropical Diseases will have to attend a two months compulsory course at the London School of Tropical Medicine seeing that the former institution has facilities for affording instruction in West African diseases and that cases of these diseases very rarely reach London.

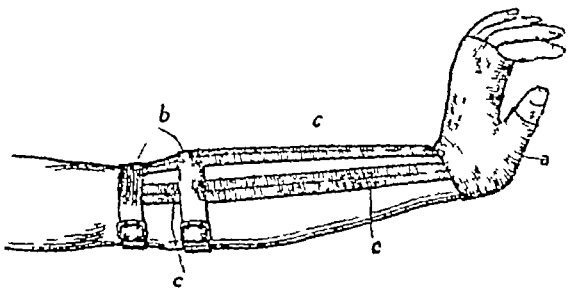
THERE is a universal desire among all classes of society to reduce to the smallest dimension the drunkenness of the nation. Opinion is sharply divided as to the merits of total abstinence. Large classes of society—larger than in any previous time—totally abstain from the dietetic use of alcohol. Leaders of science and physicians of great authority are among the number. And it is undeniable that the classes so abstaining contrive to lead cheerful and happy lives and to attain an age at least equal to that of those who drink moderately. Those who drink immoderately are out of the reckoning altogether. Some of them, indeed, have splendid constitutions inherit a tendency to longevity and reach even a remarkable age. Among the late Sir GEORGE HUMPHRY'S centenarians was one who had drunk "a great deal of beer"; but there were 15 who had drunk no alcohol, 24 who had drunk little, and six who took it moderately,

instrument, thus obviating the necessity of disengaging it with the fingers and thereby losing time I have used the instrument in my hospital work and have found it answer very well It has been made for me by Messrs Mayer and Meltzer F W FOXCROFT, M D Edin

Birmingham.

APPARATUS FOR THE RELIEF OF WRIST DROP

A MAN, aged 36 years, a worker in metallic lead, came under my care 18 months ago suffering from acute pain down the left arm and forearm with inability to extend the fingers and wrist At the end of a fortnight the reaction of degeneration appeared and at the end of six weeks, during which time he was treated daily with the galvanic current and massage, there was marked wasting of the affected muscles and no restoration of power He was then treated for some weeks at St Mary's Hospital and afterwards at the London Hospital, but without relief The flexors of the forearm were unimpaired so that, given extension of



the wrist, the grip was as good as ever I therefore determined to substitute the action of elastic bands for that of the now useless muscles The apparatus used (vide illustration) consisted of a broad buckled leather strap (*b*) encircling the arm just above the olecranon From this two broad elastic bands (*c*) extended to another similar encircling strap (*b*) immediately below the elbow joint From this second strap two elastic bands (*c*) passed down the extensor surface to be inserted at the level of the heads of the metacarpal bones into the posterior aspect of a strong leather glove (*a*) which reached only to the ends of the first phalanges. This contrivance (which was admirably made by Messrs Moody Bell of Cheltenham) acted so satisfactorily that the man forthwith resumed his previous work and has now continued it for eight months For future use I should be inclined to add an "annular ligament" at the wrist I should also substitute round elastic cords for the bands down the forearm and instead of the glove a padded strap round the hand at the level of the metacarpo-phalangeal articulation

In the above-mentioned case the splint figured in "Erichsen's Surgery" was tried, but its interference with flexion of the wrist and fingers rendered it useless

W LAWRENCE LISTON, M D Brux, M R C S Eng, L R C P Lond

Tewkesbury

[A similar contrivance, having somewhat the form of a long fingerless glove or mitten, with four elastic cords on the back adjustable for length, is figured at page 256 of the large illustrated catalogue published by M Collin (maison Charrière), Rue de l'École de Médecine, Paris Of course, this coincidence does not detract from the originality of Dr Liston's ingenious device, the straps above and below the elbow distinguishing it from the apparatus of the French maker —ED L]

QUACKS AND ABORTION

A CRITICAL AND ANALYTICAL INQUIRY

IX.[1]

WE have received copies of an interesting correspondence which passed recently between the editor of an old established provincial newspaper (the *Ormskirk Advertiser*) and an advertisement agent in consequence of the editor having flatly refused to insert an advertisement of the man Davis (of whom he had read in our article published on Dec 31st, 1898) and returned his cheque The advertisement agent, whose knowledge as to the facts and figures of which he writes we do not for a moment dispute, while we question his inferences, makes the following statement "I would point out that my client's business is a perfectly legitimate one, his pills being stocked by all the leading wholesale houses, and further, his advertisements appear in some 3,000,000 chemists' price lists published annually throughout the country Under these circumstances you really cannot class my client's business with those about whom so much has justly been heard of late" Not wishing to rely on the agent's opinion as to the class of business done by his client the editor thereupon wrote to Davis for a box of pills and received that which we also obtained in the same way The printed leaflet to which we called attention accompanied them, with its advertisements of a mixture for obstinate cases, a Positive Preventive Injection, and a book on "How to Limit your Family and Woman Her Complaints," while the same note emphasised the suggestion of the powers of the pills to cure "irregularities"—namely "These pills must not be taken by those expecting to become mothers" We congratulate the *Ormskirk Advertiser* on the stand taken by it and we feel sure that it will have earned thereby the respect of all its respectable subscribers

Curiously enough, a few days ago a case was tried in the City of London Court in which the converse of Owen v Greenberg[2] was decided In that case, it will be remembered, the action, which failed, was in part to recover the price of advertisements paid by the Irrisum Company which *Pick me up* had refused to insert In the one to which we now refer the proprietors of the *Weekly Dispatch* claimed £4 10s from an advertisement agent for advertisements which had been inserted by them After hearing the evidence Mr Registrar Wild, according to the report of the case in the *Daily Chronicle*, said that the plaintiffs must have known that it was a filthy advertisement and therefore the contract could not be enforced, and he proceeded to give judgment for the defendants He did not, however, award costs to the successful side, no doubt marking thereby his view that the nature of the advertisement, though it rendered the contract void, was a matter within the knowledge of both parties to it We can only repeat what we have already said—that no paper need continue to insert these advertisements on the ground that it can legally be compelled to do so

We add a few more names of papers which continue to insert the advertisements of those firms of which we have written in these articles or which from their advertisements of cures for irregularities and obstructions appear to carry on a similar trade and are clearly liable to be applied to by pregnant women anxious to bring about miscarriages We do not pretend that our list has been an exhaustive one, but as far as the resources at our command have enabled us and with the help of numerous well wishers who have sent us copies of country papers we claim to have made it long enough to show that the evil is still a considerable one and worthy of the attention of those whose duty it is to protect the public

One of these papers, the *Grimsby Times*, prints no less than six advertisements of the class of which we have written in one of its columns combined with others offering "a boon to weak men" and "priceless information for married ladies" We cannot congratulate the *Grimsby Times* or its readers

LIST OF PAPERS.

Auckland Chronicle.
Blackpool Times (Blanchard).
Bury Guardian.
Derby Express
Dudley Herald (Blanchard).
East Essex and Halstead Times.
Flint County Herald.
Gloucester Journal.
Grimsby Times (Martin)
Great Thoughts.
Isle of Wight Express.
Lincoln Gazette.
Lynn News (Blanchard)
Pembroke County Guardian (Blanchard)
Tring Gazette (Blanchard).
Watford Post

[1] Articles I II., III IV V VI VII and VIII were published in THE LANCET of Dec. 10th 17th 24th, and 31st, 1898, and Jan 21st Feb. 4th, March 11th and March 25th, 1899 respectively

[2] See article in THE LANCET Dec. 24th 1898.

THE Council of Charing-cross Hospital has appointed Mr A Saxon Snell F R I B A, architect in connexion with the proposed re arrangement and extension of the hospital

justify our contention that any increased consumption of beer, however good for the brewers and the national exchequer will not conduce to sobriety or to a diminution of the disease and misery produced by alcoholism. We are apparently on the eve of new legislation on this subject. It is immensely important that we should know what we are doing and realise the causes of failures of previous efforts of the kind.

A VERY remarkable series of surgical triumphs was brought under the notice of the Clinical Society of London at their meeting on March 24th In all the cases which were brought to a happy issue through the intervention of the surgeon the patients could only have looked forward to a miserable and lingering death had it not been for his assistance The first case was one of aneurysm of the abdominal aorta which the President Mr LANGTON, had successfully treated by the method of introducing silver wire into the sac after he had exposed it. To puncture an aneurysm deliberately with a trocar, introduce two yards of wire, and then to seal up the opening safely is a heroic procedure requiring a rare combination of boldness, dexterity, and coolness, and Mr LANGTON is to be congratulated in having achieved a success which has attended very few of the recorded attempts at carrying out this method of treatment The case was a formidable one The aneurysm was steadily increasing in size and as it sprang from the aorta above the origin of the superior mesenteric artery treatment by proximal compression was impracticable As the result of the introduction of the wire there were almost immediate improvement lessening of pulsation, and relief from pain Later, it is true after manipulation there were local signs denoting some return of circulation in the sac with alarming symptoms of collapse These happily subsided under medical treatment and the sac with its consolidated contents became contracted into a small firm tumour, and it is satisfactory to learn that the recovery has been a permanent one and that the patient is still in excellent health, so that the case is entitled to a place in surgical records Mr. LANGTON is to be heartily congratulated upon the result It is regrettable that there was no discussion on the subject probably owing to the fact that there were no surgeons present who had themselves any experience of this rare operation

Notable, however, as was Mr LANGTON'S communication it was followed by one which still more strikingly demonstrated the great advance which surgery is making in dealing with certain diseases of the internal organs which were formerly considered beyond the reach of therapeutic measures Mr RUTHERFORD MORISON of Newcastle brought forward a series of cases of grave organic disease of the stomach on which he had performed the operation either of pyloroplasty or of pylorectomy. He had been at the trouble of bringing five of these patients from the north, all of whom had undergone pylorectomy for malignant disease of the stomach and none of whom now would be suspected of having been the subjects of what was but lately considered to be a mortal malady—a patient from whom one half of the viscus had been removed for colloid cancer being perhaps the most robust-looking of the group They had gained weight and the gastric functions appeared to be properly carried on, the patients being able to take without fear any kind of food, they had, in fact, been regaled by Mr MORISON at York Station a few hours before with a hearty dinner These were not selected but consecutive cases and he mentioned that two other successful operations for excision of the pylorus for cancer had been performed by his colleagues during the last few months Mr MORISON had not only brought the patients but also the actual specimens removed and microscopic sections which left no doubt in the minds of those who saw them that the growths were really of a cancerous nature. The brilliant success which followed the operation in these cases afforded justification for the preference which Mr MORISON gave to it over the temporary expedient of gastro-enterostomy, an operation which leaves the malignant growth behind and, in his opinion, entails risks when the stomach is dilated, so that he would employ it only where there has been so much local infiltration that pylorectomy is impossible We are not yet in a position to judge of the permanence of the relief which the operation will afford, but in the cases shown by Mr MORISON the most careful examination failed to reveal any local evidence of recurrence although in one case 18 months had elapsed since the operation. No doubt Mr MORISON will be careful not to lose sight of these patients and will take the opportunity of informing the profession later of their progress so that it may be seen whether the removal has been early enough and thorough enough to dispel fear of local recurrence or distal infection

Mr MORISON'S paper cannot fail to give a great impetus to the surgical treatment of such cases and will stimulate the physician to perfect the methods of diagnosis so that surgical assistance may be obtained at so early a period that excision may be followed by a permanent cure The paper was valuable not only as a striking object-lesson of the progress of surgery, but also as a demonstration that the surgeons in the provincial schools are not at all behind their metropolitan brethren in skill in planning operations and performing them

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Annotations.

"Ne quid nimis."

THE ROYAL COMMISSION ON SEWAGE DISPOSAL.

INQUIRIES are heard from time to time as to the progress which is being made by the Royal Commission on Sewage Disposal The Commission have had over 25 expert witnesses before them, including chemists, bacteriologists, biologists, medical officers of health, and engineers, some of these witnesses having occupied the time of the Commission for two days each Members of the Commission have visited the works of sewage disposal at the following places Exeter, Yeovil, Manchester, Rochdale, Chorley, Sutton, Doncaster, Dewsbury, Bradford, and Leeds They have also been engaged in determining a number of important questions relating to the desirability or not of laying down chemical and bacteriological standards which should

so that the centenarian toper is an exception which proves a rule But in spite of the increasing number of abstainers and of persons who drink with conspicuous moderation the expenditure on drink continues to grow, amounting last year to the prodigious total of £154,480,934 sterling, a net increase on that of 1897 of £2,199,211 Not only is the sum spent almost incredible, but the Registrar-General shows us that deaths from acute and chronic alcoholism are increasing, especially among women The conclusion is irresistible that excessive drinking is still going on Some of it, we believe, is based on an honest belief that drink is good—that is, "nourishing"—or that it strengthens—as in the case of BENJAMIN FRANKLIN'S fellow pressman who took six pints of strong beer a day to make him "strong" The fascination of alcohol has been the theme of poets and writers from time immemorial, but it has certainly never been so powerfully illustrated and proved as it is to-day in the fact that one of the foremost nations of the world in religion, in arts, in science, in liberty, and in all that constitutes civilisation, spends out of its hard earned income £154,480,934 on purchasing it for consumption, with very little good to show for the outlay and a very great deal of evil in the form of degradation, insanity, disease, and general misery We are not drinking, indeed, quite so much per head as we were 25 years ago and we are not drinking so much per head as some other nations—France, Denmark, Belgium, Switzerland, the German Empire, and Würtemberg, but we are drinking more per head, judging by expenditure, than we have been drinking any time in the last 20 years, in spite of the influence of increased education and enormously improved social and sanitary conditions, and, as we have said, the diseases due to the acute and chronic forms of alcoholism are on the increase, especially among women

Our object to-day is not to make any definite suggestions of our own, but to direct attention to a very remarkable suggestion which has been lately made by no less an authority than the Chancellor of the Exchequer He was the guest of the Country Brewers' Association and he told them, that an unprecedented amount of beer had been produced last year and that the production was increasing yearly "There must be few babies and fewer teetotalers in the United Kingdom" said Sir MICHAEL HICKS BEACH, for "for every member of our population 31 gallons of beer are drunk in the year" He rejoiced at the fact and hoped that the increase would continue "The people of the United Kingdom would be better off if *more beer* and less spirits were drunk" In short, Sir MICHAEL HICKS BEACH evidently regards beer as a sort of temperance drink the consumption of which should be encouraged as a means of diminishing the consumption of spirit It is true that he spoke with gratitude of receiving £12,000,000 last year from the tax on beer and with hope of receiving half a million more in the current year, but Sir MICHAEL HICKS BEACH is much too good a man to speak so jauntily of his receipts from beer if he did not believe that he was speaking in the interest of the sobriety and virtue of the nation There are some politicians who could not have spoken of beer as a temperance drink without exciting a suspicion that they were joking or practising on the credulity of their audience But this is not the case with Sir MICHAEL HICKS BEACH. Can this view be entertained as a practical suggestion for the diminution of excessive drinking? It is certainly entertained by a large section of the public and it is perhaps true that excess in drinking beer is less acutely injurious than excess in drinking spirit, but it must not be forgotten that the amount of beer drunk already is enormous and that it is productive of unmistakeable harm in the classes which consume it The rheumatism and gout of the working classes are often an outcome of their consumption of beer Too much beer produces manifold forms of dyspepsia and visceral derangement It tends, too, in the quantities we are referring to as used by the people after very early years to produce various degenerations, in the direction of senility, of tissues, glandular, nervous, and vascular

"The poor man advancing in years," says Sir HENRY THOMPSON, "shows signs of damage to his constitution from continuous toil with inadequate food, the supply of which is often diminished by his expenditure for beer, which, although not seldom noxious, he regards as the elixir of life, never to be missed when fair occasion for obtaining it is offered Many of this class are prematurely crippled by articular disease and become inmates of the parish workhouse or infirmary"

Few medical men will deny the truth of these words Besides, is the issue so clear as the Chancellor of the Exchequer puts it? Does the consumption of more beer really mean the consumption of less spirit? Few medical men will admit such an opinion We certainly know of no instance in which a spirit-drinker was saved by more copious potations of beer The remedy, if not worse than the disease, is but one shade better Beer-drinkers are by no means free from the vice of spirit drinking and are certainly not unfrequently the subjects of cirrhosis We commend these medical facts to the consideration of the Chancellor of the Exchequer and of all who are disposed to regard beer in the light of a temperance drink or as an alternative to the use of spirits We may remind them that this view has once or twice prevailed in legislation with very doubtful effects One of the objects of the free beerhouse legislation of 1830, as the secretary of the present Royal Commission on the Licensing Laws, Mr SYDNEY PEEL, points out, was to discourage the drinking of spirits by encouraging the consumption of beer But it failed signally It would be disastrous if any new legislation were to be attempted on this principle If the medical aspects of the case do not impress those who regard the consumption of more beer as likely to abate the drunkenness of the nation they will perhaps look at the moral aspects of beer-drinking as they may be studied in the proceedings of coroners courts and police courts where death and crime and brutality are often associated with excesses in beer There is one other point of enormous importance which cannot fail to strike statesmen and even Chancellors of the Exchequer—that made by Sir HENRY THOMPSON in the extract which we have given above—viz, the effect of such an enormous expenditure on beer by the working classes in curtailing the power to purchase the other necessaries of life and the consequent physical and social depression of their families We need not labour these points to

the quantity disposed of per head per annum being upwards of 10 kilogrammes Denmark and Belgium come next with seven and five kilogrammes respectively, while in France the allowance per inhabitant is no more than one and a half kilogrammes On the Continent it is apparently the sum levied as duty which determines the amount consumed. In Holland coffee is entirely untaxed In Denmark and Belgium the charge is insignificant, but in France it amounts to the almost prohibitive rate of 156 francs per 100 kilogrammes, or about 7*d* a pound avoirdupois The tax with us is only 1½*d* a pound for the raw article and 2*d* when it is manufactured, so our trifling consumption of about a third of a kilogramme per head cannot well be due to fiscal causes The production of coffee is said to be increasing rapidly in South America and to be assuming large proportions in Central Africa In the Rio districts alone the augmented output for the four years ending 1897 was equal to 4,000,000 sacks, or about 240 000 tons Writing in the *Revue des Deux Mondes* for July, 1898, M de Castries says "They are planting at least 600,000 coffee plants every year in the Congo Free State and everything favours the hope that in a few years the output will have risen to upwards of 26,000,000 kilogrammes" If this is the case the price of coffee should soon fall, when in all probability our consumption of six pounds of tea per head per annum will suffer a diminution

TUBERCULOSIS IN THE FRENCH NAVY

IN 1891 special instructions were issued by the French naval authorities to the effect that the utmost care should in future be exercised in carrying out the medical examination of all candidates for service in the navy whether they presented themselves voluntarily or on compulsion No recruit whose lungs showed the slightest sign of disease was on any account to be accepted, and even in the absence of active symptoms, lack of chest development, general ill health or physical weakness were to be looked upon as sufficient causes for rejection "In spite, however, of the rigorous application of this ordinance" says Dr L Vincent in a recent paper in a French medical contemporary[1], "in spite of the numerous eliminations that are yearly effected in every port by special invaliding commissions, in spite of the hygienic ameliorations that of late years have taken place on board war vessels, that redoubtable affection, tuberculosis, is still responsible for a very large share of the mortality in the fleet, the deaths that are ascribable to it amounting to nearly one half of the total number" In his capacity as principal medical officer of the Northern Squadron Dr Vincent enjoyed exceptional facilities for inspecting the hospital records at Brest and elsewhere, and he has accordingly drawn up a series of tables referring to the decennary 1888–97, upon which he bases his conclusions The average strength during the period was 5400 men of all grades whose duties involved service afloat The number of deaths from all causes varied annually between 63 and 155, and those from tuberculosis between 35 and 69, the average numbers per annum having been 112 and 50 respectively The total death rate was equal to 20 per 1000 of strength, while that from tuberculosis alone came to as much as 9 27 per 1000 These figures are very high, but according to Dr Vincent this is partly due to the fact that fully seven tenths of the entire *personnel* of the French navy hail from Brittany and the men are consequently sent to Brest to be disposed of when invalided from other stations Writing in collaboration with a brother officer Dr Vincent has elsewhere[2] stated that the general death rate in the French fleet, with an average strength of 40,000 men, is estimated at no more than 11 per 1000, that for tuberculosis being 2 92 per 1000, but the returns upon which these rates are founded refer only to the quinquennial period 1891–95 Whatever the precise state of the case may be it is evident that preventable lung disease prevails to a very considerable extent in the French navy "Considering the care exercised in selection and all the other precautions adopted," continues Dr Vincent, "the result ought to be a complete absence of all consumptives on board our vessels, but unhappily this is only true for a very brief period after each fresh commissioning" Men who apparently were in perfect health speedily exhibit the fatal signs and notwithstanding every care the disease becomes established One of the chief predisposing causes, in his opinion, is the abuse of alcohol—that universal curse among Breton sailors who otherwise are such worthy people, but the filthy habit of promiscuous expectoration is also largely blameable Spittoons are duly provided and the most stringent notices are posted up conspicuously, but in spite of all prohibition the men persist in "spitting about pretty nearly everywhere" Incidentally we learn in this connexion that in the French navy not more than from 8 to 10 per cent of the men chew tobacco The smokers number 50 per cent., so not less than 40 per cent must be total abstainers from "the weed"

[1] Tuberculosis in the French Navy Archives de Medecine Navale, January 1899, p. 36.

[2] Statistique Médicale de la Flotte Française, par les Drs. Vincent et Burot, Paris, 1897 Travail récompensé par l'Académie de Médecine Prix de Statistique de l'Académie des Sciences.

INFECTION BY SPEAKING TUBES

A CORRESPONDENT, Mr C H Cooper, A.M I C E, writes to us a very pertinent letter in which he draws attention to the possible spread of infection by speaking tubes These tubes, says our correspondent, are practically unventilated except when in use and when the person using them speaks the moisture in the air which he exhales condenses on the sides of the tube, so that the products of respiration remain for the benefit or otherwise of the next two persons using the tube Our correspondent says that he much prefers the use of the telephone It is quite within the bounds of possibility that tuberculosis or influenza might easily be spread by the speaking tube, for to make the whistle at the far end sound the person calling has to place his lips in actual contact with the mouthpiece at his end In a telephone this is of course not the case and there is certainly one form—and maybe more—of local telephone—i e, a telephone which can be used between one room and another which works very well The connecting wire has great advantages over the connecting tube in that it can be run anywhere without disturbance of walls or plaster There are so many sources of infection which cannot be avoided that it is just as well to obviate those sources which can without inconvenience be done away with

HAWAII AND ITS DISEASES

FOR a considerable time a somewhat acrimonious correspondence has been in progress in the *New York Medical Record* regarding the health of Hawaii and particularly with reference to the prevalence of leprosy there The *fons et origo* of the discussion was an article which appeared in that journal on Oct 15th last The writer of the article in question quoted from a letter written by Dr Prince A. Morrow in 1889 in which he said (referring to the health of Hawaii)—"The demographic effects of introduced diseases in a virgin soil can nowhere better be studied and they exhibit facts of the most remarkable interest The natives have proven strangely susceptible to the diseases of civilised life, and trifling ailments—such as measles, whooping cough &c —acquire by their transplantation into this soil all the virulence of a fatal pestilence Measles and whooping cough, introduced in 1849, almost decimated the population, the mortality was excessive, almost every case

be obtained by effluents whether in the case of domestic sewage only or of such sewage combined with trade refuse For this purpose they have employed experts of their own, and it is understood that the staff of chemists and bacteriologists has just been increased, so that the effluents from works of different character can be systematically studied almost hourly by day and by night under varying conditions of temperature and rainfall No statement can as yet be made as to the term over which these experiments must extend, but it is quite clear that they are at present only in an initial stage and that, in so far as bacteriological results are concerned, the Commission are dealing with a subject as to which little expert evidence is available and that the matter will have to be examined very deliberately and exhaustively before useful inferences can be drawn These experiments are being carried out under the supervision of a committee of the Royal Commission consisting of Sir Richard Thorne, F R S, Professor Michael Foster, F R S, and Professor Ramsay, F R S

WINTER AND SPRING COLDS

THE climatic variation which is one of our insular characteristics has not been without effect upon the public health during the present year Colds have filled an important place in the practitioner's daily round of duty The recorded ratio of deaths from diseases of the respiratory organs has followed on the whole an ascending course It is impossible to dissociate such facts from the co existent weather conditions even if we allow, as we justly may, that these probably operate in many instances together with other causes of injury to health A mild, wet, and windy January, a February bleak and stormy, a March obscured by fog or sharp with winter frost and snow, though doubtless of considerable agricultural value cannot be regarded from a sanitary standpoint with equal satisfaction Nor are the reasons for a certain feeling of dissatisfaction far to seek The contagia which lodge in a dense and humid air and the directly depressing effect of cold have both severally and in common much to do with the causation of illness The answer to the question whether an external chill should result in bodily injury or not can only be given, it is true, in relative terms, but it must often be given in a sense unfavourable to the person attacked The presence of a degree of vital resistance adequate to the cold encountered or, in other words, a relatively capable heart and blood vessels under strong and steady nervous control, affords the best condition of successful resistance Unfortunately conditions of physical inheritance, birth, age, and mode of living do much in very many cases to modify this ideal position of advantage Thus we have more frequently than not to take account of some degree of unpreparedness The robust man should, indeed, be the type of ordinary humanity according to Nature's logic and he probably is when found in Nature's uncultivated wilds It must be remembered, however, that civilisation has made a difference and also that civilised man has in various ways increased that difference in vital force between him and a more simply living ancestry Consequently we have become familiar with the depression which so often follows exposure and make allowance for it more or less in all cases More particularly and for obvious reasons the dweller in towns requires such consideration But there is another agent at work in the process of "catching cold" which we have also mentioned This is atmospheric impurity The prevalence of influenza in the metropolis during the last few weeks may possibly be enhanced by this cause The same explanation adapts itself to the explanation of those infectious "colds in the head" and bronchial disturbances of allied character which are apt to be suddenly developed during a foggy season It would seem from these observations that such illness as is usually associated with weather changes is to a large extent preventable It is also evident that no elaborate medical system is needful for this purpose, but that common prudence is indispensable It is the weak man's wisdom and no disgrace to admit that he must protect and husband his reserve of strength and not emulate the unconcern of more hardy fellows The man of business again, ought so to arrange that he does not sit in a chilly office after casting off his winter overcoat No one should overlook the value of dry and absorbent flannel underwear or the equal importance of using clothes of warm material till the summer is well in Of the dangers of fog we need not speak. They are familiar to every resident in a large town It is singular, however, that the necessity of breathing air as pure as it can be obtained is constantly disregarded If the proper ventilation of private houses, and especially of places of business, were insisted on by their owners we should hear much less than we do of the infectious forms of so-called cold With this object, also, every reasonable opportunity should be used and afforded of taking exercise in the open air and this ought not in any case to prove incompatible with the active and orderly conduct of daily business

COFFEE

"'COFFEE, please,' says Tom, with his mouth full of muffin and kidney, coffee is a treat to him, tea is not." For some mysterious reason, or more probably for no reason at all other than mere chance, coffee has never risen to the rank of a popular English beverage, but still remains an unusual gratification just as it was in "Tom Brown's School Days", and yet coffee when properly treated is a most excellent and wholesome article of diet, being advantageously miscible with milk whilst readily bearing or for some even demanding the addition of sugar Many English people drink tea devoid of one or other of these adjuncts, if not of both, but except in the form of *café noir*—a form to a large extent unknown on our side of the Channel—the sister beverage is seldom taken without them It is, of course, unnecessary to dilate on the nutritious properties of milk and the value of sugar as a restorative has at length been recognised, but it is not so generally known that the coffee berry itself is not altogether destitute of nutritive qualities According to Dr Fort who conducted some interesting experiments *in propriâ personâ* coffee in moderate doses is an excitant of the nervous system, augmenting the reflex properties of its several centres and consequently acting as a stimulant and tonic to all organs of the body On the other hand Messrs Gasparin and Payen maintain that coffee produces its effects by retarding the processes of disassimilation and that it is an "inhibitory aliment' and therefore peculiarly suitable for indigent people, for travellers, and for everyone who suffers from defective appetite However it may act there can be no doubt that coffee does affect the human economy in a peculiarly agreeable and beneficent manner It is fairly cheap, easily prepared, although less so than tea, an admirable calorifacient, and there is nothing whatever to forbid its habitual use in moderation whether with meals or at other times On the whole, therefore, it would seem that its more extended utilisation in these islands is highly to be desired In 1896–97 the amount of coffee, raw and manufactured, upon which duty was paid in our Custom houses was only about 12,000 tons, whereas according to *Le Bulletin de Statistique et de Législation Comparée*—a French official publication—the total amount consumed in Europe and the United States was no less than 623,320 tons Holland, we learn from the same authority, is the country where the drinking of coffee is most in vogue,

upon its reputation as a healthy and pleasant sea-coast residential town should be governed by a local body whose doings are likely to bring it into notoriety as a place which, sanitarily speaking, is ill managed and which refuses to accommodate itself to some of the most elementary requirements of modern public health administration

COMPANIES AND THE MEDICAL PROFESSION

As will be seen by a reference to our Parliamentary Intelligence the Lord Chancellor has introduced into the House of Lords a Bill to prohibit the profession or business of physician, surgeon dentist, or midwife being carried on by a company We have not yet seen the text of this Bill, but we should hope that it is so drafted as to include medical aid societies These societies in many cases sweat their medical officers in the most disgraceful manner, as we have frequently shown in our columns

THE ASSOCIATION OF ASYLUM WORKERS

WE have received the annual report and financial statement of the Association of Asylum Workers for the year 1893 The association was formed to look after the interests of those working in asylums, both medical and lay The care of the sick is in all cases very trying work and the care of mental disease is one of the most exacting forms of attendance on the sick The responsibility is very great and the constant association with some form or other of mental disturbance is apt to react disastrously upon the minds of those who attend upon such patients Hence change of air and scene is very necessary for asylum workers, and we are glad to see that part of the good work of the association under consideration is supporting a "home of rest fund" by which nurses or attendants are granted two or three weeks holiday at some suitable health resort free of all expense or trouble The association also looks after the interests of asylum workers in connexion with proposed legislation such as the new Lunacy Bill, and also trains attendants and nurses for their duties The financial position of the association is satisfactory there being a balance of £137 14s 3d The secretary of the association is Dr G E Shuttleworth who will be happy to receive subscriptions or donations

TABES DORSALIS WITH HEPATIC CRISES

IT is well known that in the course of tabes dorsalis patients are liable to suffer periodically from paroxysmal pains affecting various parts and organs of the body In the *Journal of Nervous and Mental Disease* (February, 1899) Dr W Krauss of Buffalo records a case of special interest in which the patient suffered from characteristic attacks of hepatic crises—a condition, it would appear, hitherto unrecorded—the importance of which lies in the fact that this "syndrome" might have been easily mistaken for a separate and independent ailment of the liver were it not that the associated symptoms served to indicate its tabetic origin The case was that of a woman, aged 44 years who had hitherto enjoyed good health and was free from syphilitic taint hereditary or acquired. She menstruated in her fourteenth year and was married at the age of 23 years At 35 years of age she began to suffer from shooting pains in her legs occurring at intervals and disappearing without obvious cause Locomotion became gradually difficult and necessitated the use of crutches eventually Later she suffered from excruciating pains over the right hypochondrium, accompanied by a pronounced jaundiced tinge of the skin and mucous membranes these attacks recurred every four or five weeks and then slowly passed away, leaving her weak and exhausted in bed for several days The pains were deep seated very intense, neuralgic in character, and continuous To procure relief and to obtain sleep large doses of morphia had to be subcutaneously injected The jaundice would usually last from four to six days There was no accompanying gastric disturbance, the bowels were on these occasions regular and the stools were clay-coloured The urine showed the presence of bile pigment The hepatic area during a crisis was acutely tender and sensitive to touch—to such an extent that even the pressure of her clothing was intolerable, when the attack was over this tenderness disappeared The treatment was "suspension," and this she was able to go through when the hepatic crises were over However, in spite of treatment her ataxy increased, the pupils became myotic and exhibited the characteristic Argyll-Robertson phenomenon There was no optic atrophy or external ophthalmoplegia She gradually lost strength and wasted perceptibly, the hepatic attacks became more and more intense, and she finally died from wasting and exhaustion The necropsy revealed a normal condition of the heart, lungs, and viscera generally, excepting the liver This organ was much congested and of the typical mottled or "nutmeg" appearance The gall bladder was normal and free from gall stones The spinal cord on preparation by Weigert's method presented a "sclerosis of the posterior tracts throughout the entire length of the cord" No lesion was found in the abdomen or thorax which could explain the "nutmeg" condition of the liver and nothing to which could be attributed the paroxysmal and severe crises of hepatic pain and jaundice which Dr Krauss accordingly ascribes to the morbid process within the spinal cord affecting the nerves supplying the liver and gall bladder To the various *crises toxiques* of Charcot—viz, the gastric, laryngeal, cardiac, and rectal—must now be added the hepatic, which with the rare type of vesical, nephralgic, and urethral, and including in females the clitoric, complete the list of these painful and paroxysmal syndromes which may occur in the course of tabes dorsalis

THE CREMATION SOCIETY

AT the general meeting of the members of this society held at Grosvenor House on March 15th Sir Henry Thompson who was in the chair moved the adoption of the report and gave an address upon the progress made by the society since its inception in 1874 After detailing the various legal difficulties which the society had to overcome Sir Henry Thompson mentioned that the first body cremated in the society's crematorium at Woking was that of a lady on March 26th, 1885 In that year the number of bodies cremated was three In 1893 the number had risen to 240 Sir Henry Thompson then spoke of the efforts made by the society to bring about reforms in the present very loose system of death registration The report of a Select Committee published in 1893 fully agreed as to the necessity for such reforms, but up to the present nothing has been done to bring such reform about. Besides the crematorium at Woking others have been erected at Manchester Liverpool Glasgow, and Hull. With reference to examinations into the cause of death which are so necessary before the cremation of a body it was mentioned that Dr Sidney Martin had accepted the post of pathologist to the society Sir Henry Thompson concluded by referring to the question as to whether cremation should not sooner or later be made compulsory in all cases of death caused by acute infectious disease There are strong arguments in favour of cremation replacing earth burial, or rather coffin burial in all centres of population but even in rural districts we are of opinion that there is every room for improvement in the method of burial as at present carried out Perishable coffins should be used and graves should

terminating fatally The ravages of small pox, introduced in 1853, were none the less frightful In the island of Oahu over 15,000 died and the marshal of the islands informed me that he superintended the burial of 10,000 victims of this disease in Honolulu alone—more than one half of its entire population" With regard to leprosy Dr Morrow said "Nowhere else in the world can be found a parallel to the extraordinary development and rapid spread of this disease which in the short space of little more than one generation has attained such alarming proportions and proved such a terrible menace to the public health" The article in the *Medical Record* proceeds to state, on the authority of Dr Burnside Foster, that matters had not changed much for the better since Dr Morrow wrote in 1889 and that at the present time 10 per cent of the Hawaiian natives were lepers Dr E R Day, a member of the Honolulu Board of Health, while admitting the truth of Dr Morrow's statement as regards the first half of the century vigorously denies that matters have not changed for the better, and he gives statistics supporting his contention In the *Medical Record*, however, of Jan 28th, 1899, Dr Morrow writes as follows "As there has been so much conflicting testimony on the point I send you statistics of the leper settlement since its establishment which have been carefully compiled from the reports of the Hawaiian Board of Health"

Year	Admissions	Deaths	Discharged or unaccounted for	Number on books Dec. 31st of each year respectively
1866	141	26	10	105
1867	70	25	7	143
1868	115	28	2	228
1869	126	59	11	284
1870	57	58	4	279
1871	183	51	9	402
1872	105	64	4	439
1873	487	156	21	749
1874	91	161	8	671
1875	212	163	14	706
1876	98	122	3	677
1877	163	129	1	710
1878	239	147	—	706
1879	125	209	1	717
1880	51	152	10	606
1881	232	132	—	706
1882	71	121	6	649
1883	301	150	15	765
1884	103	163	8	717
1885	103	142	26	655
1886	43	100	8	590
1887	220	103	4	693
1888	579	212	23	1035
1889	303	149	7	1187
1890	202	158	18	1213
1891	143	212	2	1142
1892	109	137	19	1095
1893	211	151	—	1155
1894	128	156	3	1124
1895	106	128	15	1087
1896	146	116	2	1115
1897	124	139	—	1100

Dr Morrow appears to be of the opinion that, judging from the foregoing figures, leprosy does not show signs of abating to any great extent in the Sandwich Islands, while Dr Day holds the opposite view, thinking that the health authorities are slowly but surely making headway against the spread of the disease, and he predicts that the day is in sight when leprosy will be unknown in Hawaii Surgeon D A Carmichael of the United States Marine Hospital Service who was appointed by the President to report on leprosy in the Sandwich Islands completed his report a short time ago From his showing leprosy has decreased but little there and he sounds a note of warning against the dangers of importing leprosy from the Sandwich Islands into the United States Surgeon Carmichael was greatly impressed with the excellent manner in which the leper settlement at Molokai is managed There seems to be unanimity of opinion among those best qualified to judge that complete segregation is the only effective means of stamping out leprosy, and if this system is applied rigorously to Hawaii it should have the desired effect there

MORE SUNDAY NEWSPAPERS

THE secretary of the Society for the Suppression of Street Noises writes to us on this subject, saying that he hopes that the system of seven days a week newspapers will be strenuously resisted Everybody should get one day in the week off work It cannot always be Sunday, but a six-days' working week is enough for any man A great objection to Sunday newspapers is the yelling which at present seems inseparable from their distribution In the matter of street noises the London County Council is willing in spirit but very weak in flesh, for it gave in to the protest of a weekday newspaper owner, or part owner, on the subject The Government do nothing Noise, dirt, smoke, and ill health will go together until severe measures are taken But when will they be taken?

BUMBLEDOM IN AYR

THE Town Council of Ayr has at last got to the end of a long fight with the Local Government Board of Scotland The subject has been the inter relationships of the medical officer of health and the sanitary inspector That is a question which from first to last has caused a good many struggles north of the Tweed, though these struggles are happily getting fewer, and the proper position of the medical officer is coming to be more and more fully recognised When the profession succeeded in getting the Public Health (Scotland) Bill of 1897 very much modified and improved in this respect in the course of its progress to the statute-book the battle was in great measure won, but the town councillors of Ayr have been very long in recognising the fact They were determined that the sanitary inspector should in all matters be practically independent of the medical officer The Local Government Board were equally determined that this should not be permitted and the town council, after interposing every obstacle and delay which ingenuity and obstinacy could suggest, have at last been forced to yield That they have done so with a very bad grace only goes to prove their own consistency It is true that all along a small minority, headed by Councillor W J Naismith, M D Edin, have upheld the views of the central authority and have urged the council to bend to the inevitable, and we fancy the majority must now regret that they did not follow the advice which they received They are thus at the end of one fight, but that by no means terminates their troubles with the Local Government Board It seems that their hospital accommodation is insufficient and unsatisfactory and that with regard to it they have been pursuing the same dilatory course, so that now, after endless correspondence, legal proceedings are being instituted by the central authority to compel the local authority to do its duty The extraordinary ignorance and perversity of the latter are indicated by the fact that they have proposed to erect a reception house within the curtilage of a small pox and cholera hospital, and the vigour with which the Board denounces this suggestion is a quite refreshing feature of a purely official document It is nothing less than marvellous that a place the prosperity of which largely depends

the committee in this case We earnestly hope that the rules as they stand will not be passed, and even if they are that at least they will not be retrospective

THE SALE OF FOOD AND DRUGS BILL

THE Government would seem to be trifling with this section of home administration which is in urgent need of reform The Bill which was introduced by Mr Long two weeks ago was a meagre and utterly inadequate measure, but it just enables the Government to say that they have considered one of the reforms promised in the Queen s Speech We notice with satisfaction that the Bill is meeting with strenuous opposition It was decided, however, to commit the Bill to the Standing Committee on Trade and Mr Long promised that it would shortly have the advantage of detailed examination We should have thought that the labours of a Select Committee which sat for nearly four years would have sufficed to guide the Government in this important matter

THE SMOKE NUISANCE

THAT admirable association the Coal Smoke Abatement Society, though not yet four months old, has already done a good deal towards setting on foot the movement for a clean London It issues forms of complaint which can be filled up by ratepayers and returned to the society, a duplicate at the same time being sent to the vestry A coal smoke abatement section will be open at the forthcoming International Building Trades Exhibition at the Royal Agricultural Hall One thing at a time is, we suppose, an excellent motto for any society, but as medical journalists we are chiefly interested in the prevention of smoke from a medical point of view, and smoke goes together with another nuisance—noise Fresh air and sunlight are the two great remedies against not only tuberculosis, but many other diseases That smoke is an enemy of both these beneficent agencies is undeniable It blots out the sun, and the average housewife will not keep her windows open when torrents of smuts are blown in and make her house filthy Absolutely preventable dirt and absolutely preventable noises are the chief enemies to open windows, and they must both be fought The London County Council was apparently anxious to do something to relieve London of these torments and existing Acts can do a great deal if they are carried out, but as we said upon a former occasion there is great need for an Act to make it obligatory for anyone building a new house to have the fireplaces fitted with some form of smoke preventing apparatus

DR. HEINRICH PORT, late of Finsbury square, who died on March 25th, was born at Nuremberg on Oct 24th, 1843, and was the son of the Rev Christoph Port, Pastor of St Lorenz Church, Nuremberg The deceased took the degree of M D at Erlangen University in 1866 and came to England in 1868 as house surgeon at the German Hospital, Dalston In 1870-71 he served with distinction on the medical staff of the Bavarian army during the Franco-German war and received the Military Order for Merit the highest distinction given to non combatants Returning to England after the war he became one of the honorary physicians of the German Hospital, an appointment which he held till his death He was elected in 1886 a Fellow of the Royal College of Physicians of London and was for many years examining physician to the National Hospital for Consumption at Ventnor and physician to the North British and Mercantile Insurance Company

DR T GRIGOR BRODIE at present lecturer on Physiology at St. Thomas s Hospital Medical School has been nominated by the Laboratories Committee of the Royal College of Physicians of London and the Royal College of Surgeons of England to be Director of the Research Laboratories on the Thames Embankment, in the room of Dr Sims Woodhead, who has been elected Professor of Pathology in Cambridge University

DR WALDO read on March 21st to the Vestry of St George the Martyr, Southwark, a highly interesting report upon an outbreak of typhus fever which had recently come under his official notice We hope shortly to refer to the report at greater length In one house, we may say, seven members out of a family of eight and a lodger were attacked, and two died

THE library of the Royal Medical and Chirurgical Society will be closed from Good Friday, March 31st, to Monday, April 3rd, both days inclusive

INFLUENCE OF LOCALITY ON THE PREVALENCE OF MALIGNANT DISEASE IN THE COUNTIES OF WARWICK, STAFFORD, SALOP, AND WORCESTER

INTERIM REPORT OF THE COMMITTEE APPOINTED BY THE BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION

THIS Committee, which consists of Dr R M Simon (chairman), Mr T Law Webb, Dr Thomas Wilson, Dr Douglas Stanley, and Dr E N Nason (honorary secretary), was appointed at a meeting of the Branch before which a paper on this subject had been read [1] The meeting after an interesting discussion considered that the questions raised were of sufficient importance to warrant further investigations upon the lines suggested in the above-mentioned paper but upon a wider basis With this object in view a resolution proposed by Mr Lawson Tait and seconded by Dr Simon was unanimously adopted appointing a committee of five The Committee has met four times and has collected a large amount of evidence from the counties of Warwick, Stafford, Salop, and Worcester

The questions to be investigated have been approached in an absolutely impartial spirit and the Committee has not concerned itself with any theories as to the ultimate nature of any "local influence" which may be present, but has spent its time in collecting facts which may prove or disprove the existence of such influence So far returns have been received from nearly 50 registration areas in the counties above mentioned and promises of returns from many others These registration areas have for the most part been subdivided into parishes or groups of parishes and the returns from them extend, with one or two exceptions, over a period of 10 years The total population of the districts from which returns have been received amounts to somewhat over 600,000 and the total number of cases of malignant disease recorded to about 3500 The Committee has also obtained returns from some of the larger hospitals The plan adopted in the various registration areas has been to obtain returns of cases by the help of some medical man resident in the district who was sufficiently interested in the inquiry to give the necessary time and who knew the physical characteristics of the district from which he supplied returns These returns have been obtained from the registers through the courtesy of the various superintendent registrars to whom the Committee tender their best thanks In many cases the returns have been accompanied by very valuable reports which have been of the greatest assistance to the Committee

It is not intended, nor indeed would it be possible, in this report—which as many of the promised returns have not yet come in must necessarily be incomplete—to deal with all the different districts included in the scope of the present investigation or with more than a few of the many points of

[1] "The Influence of Locality on the Prevalence of Malignant Disease," by E. N Nason M D Cantab., Brit Med Jour., March 12th, 1898.

not be dug as nearly as great a depth as they are at present. The earth at a greater depth than six feet is dead and decomposition proceeds with extreme slowness. Besides, what is the sense of burying a corpse in not a more thick coverings which prevent the forces necessary for disintegration from doing their needful work?

THE PETROLEUM BILL

It is stated that the Petroleum Bill to be introduced by Mr. Jesse Collings provides for the raising of the flash-point from 73° to 80° F. and for the regulation of the construction of lamps. This looks like a compromise, the figure 80° occupying almost exactly half way between the present flash-point and the one advocated by the petroleum of the high flash-point (100°). It seems to us that the arguments urged by Mr. Collings against raising the flash-point to 100° apply almost equally to raising it to 80° to a lesser extent. We await with interest the discussion of the Government proposals and the exact details of the provisions of the Bill.

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

The election of Dr. William Sidey Church as President of the Royal College of Physicians of London will be received with satisfaction by the medical profession, but more especially will pleasure be felt within the College itself where Dr. Church's qualifications for such a post are fully appreciated. He has always taken the keenest interest in the affairs of the College, and as Senior Censor his dignified bearing and grasp of council gained him rank as a probable future occupant of the presidential chair. We add our cordial congratulations to the numerous instances which he will no doubt receive. The election was closely contested, and Sir William Broadbent, although defeated by 31 votes in a poll of 344, more remarkable have fall gracefully by receiving so large a proportion of support from the Fellows. In Dr. Church the College has a President whose scientific and literary attainments are only equalled by his skill and who will prove a worthy representative of rather than purely medical circles.

MEDICAL LEGISLATION FOR THE ISLE OF MAN.

There are some considerations for the favours of Imperial Medical Acts. One of them is to be found in the fact that they are apt to be taken as standards of perfection to be slavishly reproduced by local legislatures. The draft of a Medical Bill for the Isle of Man is before us which in its preamble and its essential clauses follows closely the lines of our own Act of 1858. The preamble sets forth the expediency that persons practising medical art should be able to distinguish qualified from unqualified practitioners. Clause 2 defines the privileges of registered persons and provides that every person registered according to the provisions of the Act of 1858 and of subsequent Acts amending it shall be entitled to practise medicine, surgery, and midwifery and to recover charges in respect of such practice, medicines, and other appliances; Clause 3 provides that none but registered persons shall be entitled to recover any charge in a court of law for any medical or surgical advice or attendance, or for the performance of any operation, or for medicines, prescribed and supplied; Clause 7 enacts that no unregistered persons shall hold medical appointments in public institutions, hospitals, friendly and other societies, &c. Clause 8 provides that no certificate shall be valid unless signed by a registered person; and Clause 9 is a reproduction of the famous Clause 31 of the Medical Act, with a significant difference—the omission of the words "wilfully and falsely." The Bill is very well as far as it goes, but it is disappointing, in view of the general inefficiency of the Imperial Act, to see a local legislature repeating all the imperfect phrases and sentences of the original Act which all are so anxious to see amended. It is the more lamentable as the present legislative proposals are understood to be made at the instance of the medical profession, which in a limited community with a compact Parliament should be able to guide and mould such legislation. The primary object of all such laws is, of course, the protection of the public. To this end medical practitioners are provided who are to be duly registered in the Imperial Register—the registration commencing due education and examination. As a part of this protection unregistered—that is, unlicensed and unexamined—persons should be kept out of the field. They should be prevented under penalties from "practising" on Her Majesty's subjects—the worst form of vivisection. Clause 31 of the Medical Act protects more than this. We want legislation that will protect the lives of the people from the experiments—and it is from the "practice"—of all sorts of practitioners whether they use titles or not. In the clause regulating the use of medical titles the words "wilfully and falsely" as we have said are omitted. This is the only original effort in the measure and would seem to have been suggested by the recent case in which the use of a title judged illegal was not punished because, not done "wilfully or falsely." The misuse of a title doubtless should be made illegal; but the whole question of medical titles is in a very unsatisfactory state, and needs more attention than is implied in this clause. We venture to advise the profession in the Isle of Man to consider further the essential demands of a good Medical Bill even at the expense of some delay in getting it.

THE ROYAL BERKSHIRE HOSPITAL.

In May of last year a committee was appointed to examine into and report upon the financial position and general administration of the Royal Berkshire Hospital. The chief of certain which concerns us is a proposed rule that the medical staff should be re-elected annually. The clauses are the elective committee which consists of the board of management and the governors. Should any member of the staff fail to be re-elected he is to be at once notified of the fact and his connection with the hospital as a member of the staff will cease. We cannot think that this is a fair or just arrangement. So far as we can see, the medical staff are to have no voice whatever in the management of the hospital from an economical point, though we suppose that there is nothing to prevent a member of the staff qualifying as a governor by means of making a donation. It is not just, moreover, that any member of the staff should be liable to be suddenly shelved without any reason being given. We fully agree with the argument that the fact of a medical man being a member of the staff of a well-known hospital is an advantage to him both in the matter of getting consultations and also in prestige. But it must be remembered that a hospital is not essential to a medical man, while medical men are essential to a hospital. So far as we know, in every metropolitan hospital a member of the staff when once elected is considered as a member for life or rather until he reaches a certain age. Another point of importance is the question—When do these new rules of passed, come into operation? Are they to be prospective or retrospective? If the latter it will be very hard for any member of the present staff, and some of the gentlemen upon it have served for a long term of years, to suddenly receive his *congé*. We are not oblivious to the fact that the staff of a hospital is not composed of infallible persons so that circumstances might arise in which it would be desirable to get rid of a person or persons on the hospital staff, but surely better methods exist than the somewhat crude one formulated by

the committee in this case We earnestly hope that the rules as they stand will not be passed, and even if they are that at least they will not be retrospective

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THE SMOKE NUISANCE

THAT admirable association the Coal Smoke Abatement Society, though not yet four months old, has already done a good deal towards setting on foot the movement for a clean London It issues forms of complaint which can be filled up by ratepayers and returned to the society, a duplicate at the same time being sent to the vestry A coal smoke abatement section will be open at the forthcoming International Building Trades Exhibition at the Royal Agricultural Hall One thing at a time is, we suppose, an excellent motto for any society, but as medical journalists we are chiefly interested in the prevention of smoke from a medical point of view, and smoke goes together with another nuisance—noise Fresh air and sunlight are the two great remedies against not only tuberculosis, but many other diseases That smoke is an enemy of both these beneficent agencies is undeniable It blots out the sun, and the average housewife will not keep her windows open when torrents of smuts are blown in and make her house filthy Absolutely preventable dirt and absolutely preventable noises are the chief enemies to open windows, and they must both be fought The London County Council was apparently anxious to do something to relieve London of these torments and existing Acts can do a great deal if they are carried out, but as we said upon a former occasion there is great need for an Act to make it obligatory for anyone building a new house to have the fireplaces fitted with some form of smoke preventing apparatus

DR. HEINRICH PORT, late of Finsbury square, who died on March 25th, was born at Nuremberg on Oct 24th, 1843, and was the son of the Rev Christoph Port, Pastor of St. Lorenz Church Nuremberg The deceased took the degree of M D at Erlangen University in 1866 and came to England in 1868 as house surgeon at the German Hospital, Dalston In 1870-71 he served with distinction on the medical staff of the Bavarian army during the Franco German war and received the Military Order for Merit the highest distinction given to non combatants Returning to England after the war he became one of the honorary physicians of the German Hospital, an appointment which he held till his death He was elected in 1886 a Fellow of the Royal College of Physicians of London and was for many years examining physician to the National Hospital for Consumption at Ventnor and physician to the North British and Mercantile Insurance Company

DR T GRIGOR BRODIE, at present lecturer on Physiology at St. Thomas's Hospital Medical School has been nominated by the Laboratories Committee of the Royal College of Physicians of London and the Royal College of Surgeons of England to be Director of the Research Laboratories on the Thames Embankment, in the room of Dr Sims Woodhead, who has been elected Professor of Pathology in Cambridge University

DR WALDO read on March 21st to the Vestry of St George the Martyr, Southwark, a highly interesting report upon an outbreak of typhus fever which had recently come under his official notice We hope shortly to refer to the report at greater length In one house, we may say, seven members out of a family of eight and a lodger were attacked, and two died

THE library of the Royal Medical and Chirurgical Society will be closed from Good Friday, March 31st, to Monday, April 3rd, both days inclusive

INFLUENCE OF LOCALITY ON THE PREVALENCE OF MALIGNANT DISEASE IN THE COUNTIES OF WARWICK, STAFFORD, SALOP, AND WORCESTER

INTERIM REPORT OF THE COMMITTEE APPOINTED BY THE BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION

THIS Committee, which consists of Dr R M Simon (chairman), Mr T Law Webb, Dr Thomas Wilson, Dr Douglas Stanley, and Dr E N Nason (honorary secretary), was appointed at a meeting of the Branch before which a paper on this subject had been read [1] The meeting after an interesting discussion considered that the questions raised were of sufficient importance to warrant further investigations upon the lines suggested in the above-mentioned paper but upon a wider basis With this object in view a resolution proposed by Mr Lawson Tait and seconded by Dr Simon was unanimously adopted appointing a committee of five The Committee has met four times and has collected a large amount of evidence from the counties of Warwick, Stafford, Salop, and Worcester

The questions to be investigated have been approached in an absolutely impartial spirit and the Committee has not concerned itself with any theories as to the ultimate nature of any "local influence" which may be present, but has spent its time in collecting facts which may prove or disprove the existence of such influence So far returns have been received from nearly 50 registration areas in the counties above mentioned and promises of returns from many others These registration areas have for the most part been subdivided into parishes or groups of parishes and the returns from them extend with one or two exceptions, over a period of 10 years The total population of the districts from which returns have been received amounts to somewhat over 600,000 and the total number of cases of malignant disease recorded to about 3500 The Committee has also obtained returns from some of the larger hospitals The plan adopted in the various registration areas has been to obtain returns of cases by the help of some medical man resident in the district who was sufficiently interested in the inquiry to give the necessary time and who knew the physical characteristics of the district from which he supplied returns These returns have been obtained from the registers through the courtesy of the various superintendent registrars, to whom the Committee tender their best thanks In many cases the returns have been accompanied by very valuable reports which have been of the greatest assistance to the Committee

It is not intended, nor indeed would it be possible, in this report—which as many of the promised returns have not yet come in must necessarily be incomplete—to deal with all the different districts included in the scope of the present investigation or with more than a few of the many points of

[1] "The Influence of Locality on the Prevalence of Malignant Disease," by E. N Nason M D Cantab., Brit Med Jour., March 12th, 1898.

interest which have been noted It may, however, be interesting to the Branch to hear some few particulars of the work done by the Committee as showing the kind of facts which have been collected and which have an important bearing upon the questions which the Committee is investigating The following extracts from some of the reports which have been received will also serve as a guide to those whose reports have not yet been sent in

The percentage death rates[2] for malignant disease for 10 years vary greatly in the various districts and parishes, between the low rates of from 0 3 to 0·35 in some to the high rates of from 0 75 to 1 5 in others In some portions of these latter districts the rates are higher still, as noted by Mr Rubra and Dr F M Rowland, to whose reports reference will be made later The M—— registration area has a cancer death rate much above the average This is found on analysis to be chiefly due to a group of parishes M——, H——, G P——, and L P—— The rates in these parishes are respectively 1 77, 1 74, 1 3, and 1 98 It is found that the mortality in the adjoining district of C—— drops to 0 68 and in the parish of C—— itself to 0 51 In the opposite direction a steady decrease is also found passing through the villages of B——, F——, and A——, with percentages of from 0 8 to 0 7, till the large district of F—h—l is reached with the low percentage of 0 34 Mr Wall in his report of the M—— district says, speaking especially of the sub-district of H—— "Some parts of it are very marshy and low lying", C——, on the contrary, lies on the steep slope of a hill The F—h—l district again is on higher and drier ground Mr J Orton in his report of this district says "The River Sowe is the only stream in this district and flows through the scattered district of S—— The subsoil here is a thin layer of clay overlying sand and sand rock, both very porous"

Mr Rubra has forwarded a very full and interesting report of the T——h and Ba——y districts from which report the following extracts are of special interest "I find nearly one-third of the deaths (from malignant disease) in the township of T——h occurred in a small area a little more than a quarter of a mile in length I have personally taken a census of this area which is not thickly populated There are 517 inhabitants, practically all the houses being occupied This gives a percentage mortality of 1 9, or nearly four times that of the rest of the T——h district With regard to its physical conditions, the river Tame, which is highly polluted with sewage from the Birmingham district, flows a sluggish black stream in close proximity, some of the houses being on its banks As a little further from the river a boring proves that the ground water rises to the level of the river it is only fair to suppose that the polluted stream percolates throughout the area I need scarcely say that the subsoil, which is mostly clay and gravel, is very damp, ground fogs are prevalent and floods not unknown The majority of the inhabitants of this area are poor people existing in mouldy old cottages, the floors and walls of which are generally damp The water supply, however, is excellent, being pumped from deep wells two miles away"

Dr A J Martin makes an analysis of 50 cases occurring in B——, in which he points out some very remarkable grouping of cases Thus in X road there were four deaths occurring respectively at Nos 3, 4 6, and 22 At the back of X-road runs Y street where three cases occurred two of which were in houses the backs of which adjoined the above mentioned numbers in X road "These houses," Dr Martin states in his report, "are near those in Z street, where two other cases had occurred, are all very damp and are built upon a clay bed, they are some of the oldest houses in B—— Opposite them is a big ditch nearly always containing water and behind this is the churchyard on a level two or three feet above them" Of the Y street houses he says "All these houses are damp and always have water in their cellars" In conclusion he says "The cancer houses occur in groups, nearly all are built on clay; all but one are damp Part of B—— is built on sandy soil and although houses here are very dirty and the inmates poor they are almost free from cancer" The total cancer mortality for B—— is much below the average, being only 0 3, which fact lends additional weight to these observations With regard to the town of W——, a street analysis made out by Dr Martin shows again some remarkable grouping of cases It is noticed that in no less than six instances have more than one death from malignant disease occurred in the same house during the 10 years and in one instance three deaths In frequent instances, too, it is found that the cases occur in close proximity Thus, the cases in T——street were at Nos 11, 13, and 17, in M—— street at Nos 37 and 39, in H—— lane at Nos 15, 17, 19, and 37, in W—— villas at Nos 3 and 4 &c

Dr A J Martin sums up as follows "The geology of W—— is interesting The town is built partly on a sand bed partly on a clay bed of varying thickness, overlying a bed of limestone This clay has in many cases been thrown out into mounds to get at the limestone Houses have been built upon these clay banks and, speaking generally, these are the houses where cancer occurs They are all damp, some very much so They are among the oldest houses in W—— The new houses are almost entirely free Parts of the town built upon the sand beds are free although in most of these positions the poorest of the inhabitants live crowded together under anything but sanitary conditions The sand and clay beds are in places sharply defined, a 'cancer area' on the clay bed being likewise sharply defined from an area almost free from cancer contiguous to it on a sand bed" Dr Martin accompanies his report with a coloured map of W—— in which these facts are represented graphically

The percentage cancer mortality for the L—— district for 10 years is 0 62 Dr I M Rowland remarks that E——, Ch——, and C—— are the districts with the highest rates—viz, 1 87, 1 5, and 1 52 respectively The two former are very low lying, practically on the water, and are subject to floods The small village of C——, on the contrary, is hilly and high above sea level It has, however, a stream which though rapid, some two years ago fell under suspicion of pollution which was supposed to be the cause of the loss of some cattle The percentage for the neighbouring district of R—— is 0 71, for the town of R—— 0 77, and for the town of A—— 0 79 From interesting reports on the physical conditions in these districts kindly supplied by Dr W L Hubbard and Mr W E Rogers we find that A—— lies between the rivers Trent and Tame and is very flat and low Water can be reached anywhere at from four to five feet down The soil is a black sandy peat The town of R—— lies low and is skirted on one side by the Trent, the meadows close to the river are generally flooded after heavy rain The soil is a loose washed gravel with line of saturation from 12 feet to 14 feet below the surface The death rate of the C—— urban district is 0 35, just half that of the contiguous district of R—— above mentioned Mr J N Phillips's excellent report gives the geological characters of the district as "generally a gravelly soil of the new red sandstone formation with a mixture here and there of clay beds The surface consists of a series of undulations sloping gradually down from Castle Ring which is 800 feet above sea level The surface formation, together with the gravelly subsoil renders it peculiarly adapted for the efficient filtration of surface waters"

Dr W B Murray in his report of the T——y union says "The parishes which have the highest rate of mortality for malignant disease are with one exception those which lie in the Teme Valley and on the south bank The subsoil, I believe, is gravel The river receives untreated the sewage of L—— and T—— and all the valley is very liable to ground fogs almost nightly The parishes which are free as a rule lie on higher ground" The percentage mortality for the whole district is 0 89

It is not possible to give extracts from all the reports received, but the above have been selected as being good instances and as being specially interesting It has not been forgotten by the Committee that in order to ensure complete accuracy in the statistics upon which they have relied correction should be made for both age and sex incidence With regard to the latter it does not appear that in any case dealt with so far the figures would have to be materially altered in consequence With regard to the former, however such correction would probably raise the proportionate cancer death rate in most of the centres of industry and lower it in country districts, but it would scarcely affect the figures when two contiguous country districts are compared

As far as this investigation has at present gone there seems to be a very large balance of opinion in favour of the following conclusions which are also largely borne out by the facts collected by the Committee. (1) the districts in which malignant disease occurs with a frequency much above the average often lie side by side with other districts in which it

[2] The average mortality from malignant disease in England and Wales for the decade 1880 90 was 0·58 per cent.

rarely occurs, and (2) the districts in which malignant disease occur with the greatest frequency are usually ill drained, low lying or flat, or border upon streams, while those districts where it is less common are usually higher drier, and more open, with the possibilities of more rapid drainage of surface waters

That certain physical conditions influence the prevalence of malignant disease is suggested by the figures published in the Supplement to the Fifty fifth Annual Report of the Registrar General Part I Here it is seen that the cancer death rate (uncorrected for age or sex) which averaged in the decade 1881–90 0 58 per 1000 per annum rose in the case of Cambridgeshire to 0 78 and in that of Huntingdon to 0·91 and fell in the cases of Durham, Staffordshire, Lancashire, Derbyshire, and Monmouth to from 0 44 to 0·48 This variation was also noticed in the same counties in the two previous decennia Dr Tatham remarks in his excellent comments on these returns "An examination of the uncorrected cancer rates in the separate registration districts within and around the counties of Huntingdon and Cambridge shows a fairly well-defined area in which cancer would appear to be exceptionally prevalent This area consists of the districts of Stamford, Bourn, Spalding, and Holbeach in Lincolnshire, Oundle and Peterborough in Northamptonshire, and the entire counties of Huntingdon and Cambridge with the exception of the registration districts of Caxton, Linton, and Newmarket' A glance at the map will show that this particular area is a low lying piece of land through which slowly meander the various rivers and streams which terminate in the Wash Mr Alfred Haviland in a paper published in 1879 says "The mortality is highest in those districts which skirt the rivers of our country which are seasonally flooded Throughout England and Wales there does not exist an important river subject to seasonal floodings that does not flow through high mortality districts" He adds that all those districts where cancer does not thrive "are characterised by being high and dry and geologically composed of non retentive soils—permeable soils and subsoils, in fact"

Dr W H Symons published in the December number of *Public Health* a careful and interesting paper on Cancer in Relation to the Dwelling After tabulating the cases of malignant disease occurring in the city of Bath for a number of years he comes to the following conclusions "In Bath there are no 'cancer houses' and I find no evidence that locality has any influence upon the prevalence of malignant disease The cause of cancer appears as far as this investigation affords information to be generally personal or intrinsic" But it is unnecessary to point out that the problem in Bath with its "large nomadic senile population" is a far more complex one than is the case in country districts or in towns with a more fixed population This characteristic, while helping to explain the high cancer mortality of Bath, must also greatly increase the difficulty of drawing any correct conclusions from the results of an inquiry into the local incidence of cancer Whether the character of the immediate subsoil apart from its humidity or perhaps the stagnation or contamination of the water which it contains has any influence on the prevalence of cancer seems at present very doubtful Some returns point very strongly to a greater prevalence on clay soils, while others again suggest a greater frequency on sand In this connexion it should not be forgotten that a shallow sand bed overlying clay or other impervious material, a not uncommon condition, may be even more damp and water-logged than where the subsoil is entirely of clay Again if the clay is only a thin layer and overlies sand sandstone, or other porous material, then a much drier condition of subsoil obtains than where the reverse is the case It also seems more than doubtful if the variations in cancer mortality are in any way dependent on the quality of the water used for drinking or on overcrowding *per se* What however seems almost certain is that there is a direct connexion between the presence of subsoil water within a certain distance of the surface and the prevalence of malignant disease.

It is hoped that the returns for the four counties included in the scope of the present inquiry will be sufficiently complete by next autumn to enable the Committee to present to the Branch a full report dealing as far as possible with each district The Committee should then be able to add some valuable information to what is already known on this subject of the importance of which there can be no doubt The Committee wish to take this opportunity of thanking all those who have been good enough to aid in the work by supplying reports and returns and without whose assistance the work of course could not have been even attempted In conclusion, the Committee asks permission to continue its investigations for another year with the approval and sanction of the Branch

THE EMPLOYMENT OF COMPOUNDS OF LEAD IN THE MANUFACTURE OF POTTERY.

'WE have seen admirable examples of printed ware dipped in leadless glaze and it is significant that these results were obtained in trials made upon a manufacturing scale and upon pottery intended to be placed upon the market by leading firms of high reputation." 'We have no doubt whatever that leadless glazes of sufficient brilliancy covering power and durability and adapted to all kinds of table domestic, and sanitary ware, are now within the reach of the manufacturer"—(Professor T E. THORPE, LL.D., F.R.S., and Professor THOMAS OLIVER M.D., F.R.C.P Lond. in a report just printed in the form of a Blue-book and dated Feb. 21st, 1899)

We next turn to the possibility of doing away with lead altogether Obviously could this be done without interfering with the peculiar and delicate requirements of the art of glazing we might confidently hope for a speedy and satisfactory solution of a very difficult question. We now offer the results of some experiments which we ourselves have made with certain leadless glazes in THE LANCET Laboratory" 'We consider that these results are of the utmost importance for they indicate the probability of satisfactorily substituting absolutely leadless glaze for the old lead veneer without detriment to the beauty and finished appearance of the product It seems to us therefore that the ground should be perfectly clear for action by the Home Office. Either leadless glazes are practicable or they are impracticable. It is for a committee of experts to decide one way or the other with the evidence of practical trial before them."

We understand that already some large pottery manufacturers and others with a considerable experience of the industry have tried these leadless glazes on a practical scale with excellent results."—(THE LANCET Analytical Commission on Some Leadless Glazes THE LANCET Jan. 7th, 1899 p. 49.)

A more striking and complete confirmation of the views which our Commissioners expressed in these columns nearly two months before the issue of the Government expert' report on the subject than is presented in this first paragraph could hardly have been forthcoming The Blue-book dated Feb 21st 1899, is another evidence of the ability of Professor Thorpe and Professor Oliver to deal with the question of dangerous trades and the means which might be adopted to counteract their evil effects Last week we dealt with the report of these gentlemen upon phosphorus in the manufacture of matches (they were then aided by Dr Cunningham who inquired into the dental aspect of the question) and we said that the joint report was a valuable contribution on the subject which should enable the Government so to regulate the manufacture of lucifer matches as to place the great number of workers in this important industry under conditions entirely free from reproach It was concluded that there need be no phosphorus necrosis, with regulations strictly yet not vexatiously enforced The report on lead compounds used in pottery manufacture is equally valuable and its import equally clear Professor Thorpe, as in his previous inquiry, visited several Continental factories and his observations are very instructive, mainly in showing how increased legislative control need not interfere with the interests of the industry He records further some experiments made in the Government Laboratory upon lead compounds used or proposed for use as substitutes for raw lead in the pottery industry The conclusions arrived at as the outcome of the entire inquiry are as follows —

1 That by far the greater amount of earthenware of the class already specified can be glazed without the use of lead in any form. It has been demonstrated without the slightest doubt that the ware so made is in no respects inferior to that coated with lead glaze. There seems no reason, therefore why in the manufacture of this class of goods the operatives should still continue to be exposed to the evils which the use of lead glaze entails.

2. There are however certain branches of the pottery industry in which it would be more difficult to dispense with the use of lead compounds. But there is no reason why in these cases the lead so employed should not be in the form of a fritted double silicate Such a compound if properly made is but slightly attacked by even strong hydrochloric acetic or lactic acid. There can be little doubt that if lead must be used the employment of such a compound silicate if its use could be ensured would greatly diminish the evil of lead poisoning.

3. The use of raw lead as an ingredient of glazing material or as an ingredient of colours which have to be subsequently fired should be absolutely prohibited.

4 As it would be very difficult to ensure that an innocuous lead glaze shall be employed we are of opinion that young persons and women should be excluded from employment as dippers, dippers assistants, ware cleaners after-dippers, and glaze-placers in factories where lead glaze is used, and that the adult male dippers dippers assistants, ware

cleaners, and gloss-placers should be subjected to systematic medical inspection.

One suggestion in the report is worthy of quotation It is pointed out that much of the ware supplied to the order of various Government departments, such as the Post Office, the Office of Works, the Admiralty, the War Office, the India Office, &c, could be dipped in leadless glaze without detriment to its character and with no increase to its cost If in these cases the supply of leadless glaze were insisted upon it would thereby stimulate the more general introduction of pottery free from lead compounds We congratulate Professor Thorpe and Dr Oliver in thus appealing to the Government and putting its sincerity to this most excellent practical test

We said in the report of THE LANCET Commission on Some Leadless Glazes that "it may be hoped that the day is not far distant when the Government will be in a position to demand the abolition of raw lead in glazing and to compel the adoption of safe 'frits' or better still leadless glazes without inflicting any hardship on the potter or causing any hindrance to the pursuit of his art" We submit that the Government is in this position now

CONTAMINATION OF UNIFORMS IN THE AMERICAN ARMY

IT is now twenty one years[1] since we published the report of a Special Commission on the Contamination of Uniforms Provided by the Army Clothing Depôt From the Army Clothing Depôt and Factory at Pimlico some material for uniforms and underclothing was given out to be made up at the workers' homes On examining the books of the sanitary authorities our Commissioner found that houses inhabited by the women doing this work had been disinfected because there were cases of small pox, scarlet fever &c On the other hand, by looking over the books at the Army Clothing Depôt it was ascertained that work had been given out to the inhabitants of these houses at the time when infectious disease prevailed in these dwellings Apart from this proof positive of the risk of contamination many of these houses were visited and information obtained from the inhabitants confirmed the opinion that such home work was dangerous This report caused a considerable sensation at the time and a question was asked in the House of Commons on the subject by the late member for Finsbury, Mr McCullagh Torrens In view of meeting this difficulty experiments were made at the Army Clothing Depôt on the effect produced on cloth by the process of disinfection Unfortunately it was then demonstrated that ordinary cloth lost 5 per cent of its resisting power after it had been disinfected The test was very simple and the usual one applied to estimate the strength of a piece of cloth The material is stretched across a form or table and weights added to each end in such a manner as to pull the cloth asunder As the weights increase the cloth begins to yield and finally it splits in two It is then only necessary to reckon up the weight required to tear the cloth, and in this manner it was proved that the same piece of cloth gave way with 5 per cent less weight attached to it after disinfection than it had done before its exposure to dry heat In those days steam under pressure was but rarely employed for disinfecting purposes At the same time a curious fact was ascertained, serge was if anything improved by the disinfecting process, but there is comparatively little serge used for uniforms It should be remarked that there are good reasons for giving out work It is very desirable to help soldiers' widows who cannot leave their families to work within the walls of the factory but who are able to watch the cooking and the children while working at home But when disease breaks out among the children or other inhabitants of the same house or tenement these women can ill afford to lose their work so as to avoid the risk of contaminating the clothing which they make up Therefore, as a certain amount of deception was likely to occur—indeed, we had proved that such deception had occurred—the army authorities thought the safest plan would be to disinfect all clothing made up outside the factory This plan, however, could not be adopted when it was seen that by so doing the wearing capacity of the clothes would be deteriorated Consequently the amount of work given to outside workers was reduced to a minimum

It would seem that exactly the same problem has attracted the attention of the military authorities in America The Philadelphia *Evening Telegraph* has just published an account of the difficulties which have occurred at the Schuylkill Arsenal These were of so serious a nature that on March 1st last a radical change in the management was introduced A new rule was made forbidding the giving out of work unless the seamstresses showed a certificate from a factory inspector proving that their homes were in a perfect sanitary condition But there is in this not only a sanitary grievance it has also an important economic bearing which recalls the arguments contained in our reports and articles on the sweating system Some time ago Major G S Bingham the commandant in charge of the arsenal, ascertained that some women had, by pleading poverty, obtained trousers to make up for which they were to be paid 75 cents per pair An inspector called at their homes and discovered that they were not doing any work whatsoever They had passed the trousers on to a Russian sweater who had undertaken to make them up for the sum of 30 cents per pair That this can be done and with a profit for the sweater will be readily understood by all who are familiar with the intricacies of the sweating system But on the other hand and apart from the fraud of obtaining work under false pretences, the question arises—What is likely to be the sanitary condition of the sweating den where by an elaborate sub division of labour and the employment of starving, underpaid, and unskilled workers trousers are turned out at the low figure of 30 cents per pair? Every year there are from 2000 to 3000 women who apply at the Schuylkill Arsenal for work, and of course it would be gross injustice to conclude that they all hand over such work to sweaters As far as possible the work from the Schuylkill Arsenal is given out on similar lines to those adopted at the British Army Clothing Depot at Pimlico—namely, to widows and other deserving persons who have some moral claim upon the Government and the army In America as in London more than the market wage is paid and the women receiving 75 cents for making up a pair of trousers are able to earn as much as $30, or £7 8s per month, which is a good rate of wages even for America The fact that the Government pays 75 cents for what a sweater will undertake to do for 30 cents gives the authorities a better right to insist that the work shall be done in wholesome surroundings From the commencement of the month of March Major Bingham and his subordinates have carefully questioned all the women to whom work has been given and the factory inspectors are busily seeing to the sanitary condition of their homes This is the right principle Proper remuneration is the first necessity It is mere hypocrisy to talk about sanitary homes when the workers cannot earn enough to pay the rent of a sanitary dwelling

[1] THE LANCET, Feb. 9th, 1878, p. 217

THE ROYAL COMMISSION ON THE METROPOLITAN WATER-SUPPLY

THE sixtieth sitting of the Royal Commissioners was held at the Guildhall, Westminster, on March 14th Mr E A Bonnor Maurice was briefly examined with regard to the present statutory conditions of the control of the metropolitan water companies' undertakings, and he put in a table containing a summary of the main statutory provisions as to control (1) in respect to their obligations to lay mains and provide and supply water throughout their districts, and (2) in respect of the quality and quantity of the water supplied The latter part of the sitting was occupied by a speech by Lord ROBERT CECIL on behalf of the Hertfordshire County Council, Mr PEMBER, Q C, also addressed the Commissioners on behalf of some of the metropolitan water companies, and his speech was continued at the sixty first and sixty second sittings which were held on March 20th and 21st

The sixty third sitting was held on March 22nd Mr POPE, Q C, spoke on behalf of some of the metropolitan water companies, Mr LITTLER Q C, for the Kent Company, and Mr BALFOUR BROWNE, Q C, on behalf of the

project of the London County Council to purchase the companies' undertakings.

The sixty fourth sitting was held on March 23rd and was occupied entirely by the latter part of the speech of Mr BALFOUR BROWNE, at the conclusion of which the Commissioners adjourned *sine die* to consider their report

At the end of the proceedings the CHAIRMAN asked the representatives of the water companies to send a table containing full particulars as to the arrangements of the mains of the companies inside and outside the metropolitan area, in order that they might be able to see what changes would have to be made with regard to the distribution of the water if the undertakings were to be re-arranged so that the county of London and the outlying authorities might each have entire possession of the means of distributing water in their respective districts

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We gave in THE LANCET of March 25th a report of the fifty eighth sitting of the Royal Commissioners but we were prevented through want of space from giving a summary of the evidence given by Mr George Corble clerk to the Lee Conservancy Board The condition of the River Lee is a matter of such serious import that we have decided to return to the subject.

In answer to the CHAIRMAN Mr CORBLE said that the clerk to the Lee Conservancy Board was appointed by the whole Board and that he appeared before the Commissioners to represent the views of the Board and was authorised by them to do so In the course of his evidence the witness said that the upper sources of the Lee were situated near Luton in Bedfordshire, 25 or 30 miles above the town of Hertford and that a large number of tributary springs joined the river in its course The history of the Lee Navigation goes back to a very early period the first Act of Parliament which deals with it having been passed in the year 1424 [1] At the present time the chief trade carried on by the Navigation is in building materials, barley and other cereals, gunpowder and dangerous explosive goods, manure, and gas lime, and about 600 000 tons a year pass over the Navigation which extends from London to Ware and Hertford and embraces Tottenham, Walthamstow, Edmonton, and Waltham Abbey The tolls for the year 1890 amounted to £15,577, they however, vary in amount from year to year The water companies pay a sum of £3500 and the Conservancy possess real property to the annual value of £1300 a year They also received last year a sum of £1129 from the water companies This, the witness said was a voluntary contribution which they had of late years made to the Conservancy For five years an extra contribution of £1500 had been made from the New River and East London Companies to the Conservancy, but two years ago they reduced this payment to £1129 odd

The CHAIRMAN asked why this voluntary contribution was made and the witness replied that in the first place it was made to repay the Conservators for an item, £6000, which they had expended on a lawsuit which they had fought against the town of Hertford about the sewage The Conservators thought that the water companies ought to contribute towards the expense of this and the water companies had chosen to contribute money in this way After having contributed to the Conservators the sum of £1500 for five years they now agreed to pay them the sum of £1129 last year

In answer to Mr POPE, Q C, the witness said that there was no agreement as in the case of the Thames Conservancy to allow the water companies to take an increased draught of water from the Lee, and in answer to the CHAIRMAN the witness would not admit that the Conservancy were required to shut their eyes to any extra draught of water in consideration of that payment nor to take less than their statutory navigation quantity It was a pure gratuity The Conservators had complained to the water companies "in rather a piteous way" that their funds would bear increasing

In answer to the CHAIRMAN the witness said that the lawsuit between the Lee Conservancy and the town of Hertford was fought in the year 1886 and that the Conservators failed in their action Since that time they had been in continual communication with the Local Government Board with regard to the matter

In answer to Major General SCOTT the witness said that as a matter of fact nothing had been done with regard to the Hertford sewage The Conservators had "paused before entering upon another expensive lawsuit"

[1] 2 Hen. VI. The second Act was passed in the following year

In answer to the CHAIRMAN the witness said that it was the Lee at Hertford which was polluted by the sewage which ran in at a point just below Ware Lock below the intake of the New River Company and about 15 miles above the intake of the East London Company

The CHAIRMAN asked whether there was no remedy under the Rivers Pollution Act Lord ROBERT CECIL said that the learned judge before whom the case was tried found that there was no pollution The witness said that the river was as black as his Lordship s hat and that it could be smelt for a mile off Lord ROBERT CECIL suggested that such a statement was commonly made by an unsuccessful litigant. The witness replied that the judge had himself made a statement to the same effect, that he had twice visited the place, that he said he was an old fox hunter and did not require any scientific evidence, and that it was sufficient for him to follow his nose and to follow the line of the river

The CHAIRMAN asked whether in that case the learned judge had found that there was no pollution of the river and the witness said that that was so

Mr POPE suggested that the finding was that there was no pollution within the meaning of the Act and Lord ROBERT CECIL said that he thought that the judge found that the apparent pollution was due to vegetable growth, but Major General SCOTT said that he had read the judgment very carefully and had not come to that conclusion The learned judge had said that under the English law there was not that degree of pollution which was indictable

In answer to the CHAIRMAN the witness said that navigation was not stopped at any time during the year 1898 above Old Ford Lock which is within three miles of London and is the next lock above Limehouse Cut The witness afterwards qualified this statement by saying that he did not think any barges were stopped for more than an hour or so above this point Below that point the barges were stopped The witness explained that they were sometimes stopped in Limehouse Creek owing to exceptional neap tides The neap tides were, however, not peculiar to the year 1898 Whenever the tides were very low the barges were delayed in Limehouse Cut

The CHAIRMAN asked whether there was anything peculiar in 1898 which interfered with navigation beyond the circumstances which happened in other years The witness said that there was no peculiarity but that "perhaps" they were not able to send quite so much water as they were in other years to help the Limehouse Cut He asserted, however that complaints were not more frequent in that year than they had been before.

The CHAIRMAN pressed the witness on the point as to whether the fact that the year was an extraordinarily dry one had interfered with the navigation and the witness replied that "it would only have affected it in the Limehouse Cut."

The CHAIRMAN wished to know why this was so, and the witness began by explaining that it was a very peculiar place and required a great deal of understanding

The CHAIRMAN said that the Commissioners would open their minds to anything which he chose to tell them on the matter The witness explained that the Limehouse Cut goes from the Thames, is about a mile and a half in length, and that at neap tides the water might be from 18 inches to two feet under head—that is to say below the level at which it ought to be

In answer to Major General SCOTT the witness said it would be impossible to fill up the Cut by passing the full statutory quantity of water down

The CHAIRMAN asked why this was so, and the witness said that before it could be done the next tide would go out and the Cut would then be reduced to the same condition as it was in before

The CHAIRMAN again asked why the Limehouse Cut was affected in 1898 more than in other years, and ultimately the witness replied that probably in other years they were able to send down more water down the Navigation

The CHAIRMAN said that it was, then, because they had failed to send down water from above that the navigation of Limehouse Cut was interfered with in 1898 The witness however again spoke of extraordinary neap tides and he thought that one or two of these were exceptionally low last summer

The CHAIRMAN asked what the difficulty was in getting enough upland water Was it not that the companies had taken it? The witness said that he could not deny that

The CHAIRMAN remarked that he did not desire the witness to deny anything which was true, and the witness

admitted that if water was taken above they could not get it below

The CHAIRMAN said that that appeared then to be the cause of the trouble Was it not a fact that there was not enough water in the river because it was taken from above? The witness then explained that the Conservators passed down the water by the lockful, they could not, he said, simply open the lock slackers and let the water run right way They had to pass it "according to Act of Parliament," to measure it lockful by lockful—that is to say, they had to fill the lock, to empty it, and to keep a record, because the water companies could compel them to do so under the Act of 1855, and their books had to be open to the inspection of the water companies

The CHAIRMAN asked whether if the companies took nothing at all and the full flow of the Lee were allowed to flow down whether the water could not be passed into the Limehouse Cut in time to prevent the inconvenience which the witness admitted the Navigation suffered The witness replied that the total quantity which they were allowed by their Act to take was 5 400,000 gallons This he "put at 76 locks," but "really" 77 locks amounted to 5,390,000 gallons.

Lord ROBERT CECIL suggested that it would be useful if the witness would call the attention of the Commissioners to the section of the Act of Parliament which he said imposed obligation on the Conservancy Board to pass down the water in the manner he described and at a later part of the examination pointed out that there was no foundation at all for the statement

The CHAIRMAN asked what amount of water the Navigation took per day The witness replied that they "put it at" about 1,800,000 gallons, but that it really amounted to something less than that and that it varied according to the trade He admitted that this quantity was very much less than they were entitled to take and stated that the average had been even less than the amount he had previously given It sank as low as 1,261,370 gallons In answer to further questions he admitted that if they had taken in the 24 hours in the Limehouse Cut the amount of water to which they were entitled he did not think that the navigation would have been incommoded

The CHAIRMAN asked why they did not take the amount to which they were entitled daily The witness replied that it might interfere with the navigation, but he afterwards admitted that at other times they had not got that amount of water to pass

The CHAIRMAN remarked that they had not got it to pass because the water companies had taken it and he asked why they did not pass down the full amount 5,400,000 gallons He suggested that if the water companies had not taken the water the Lee Conservators would be able to get 5,400 000 gallons a day The witness said that they were obliged to consider that the East London Company had "to take their quantity"

Mr MELLOR suggested that a lockful meant a measure or a quantity to fill and empty the locks The witness finally admitted that the Act had in fact provided for that, but that they had not adopted the provisions with regard to measurement to which they were entitled

In answer to Mr DE BOCK PORTER the witness said that he could not disguise the fact that the navigation was hampered by the draught made upon the Lee by the water companies

In answer to Mr MELLOR the witness admitted that the navigation was hampered to a considerable extent

Mr DE BOCK PORTER said that the relations between the Conservancy and the water companies appeared to be friendly The witness said "No, we stick to our rights and they stick to theirs"

The CHAIRMAN pointed out that the witness had already confessed that the Conservancy did not stick to their rights, that, on the contrary, they had abandoned their rights and instead of taking 5 400,000 gallons of water they had only taken 1,500,000 The witness replied that the water companies paid them water rents which were a large item of their income.

The CHAIRMAN said that the Lee Conservancy being a body appointed to look after the navigation of the river had sacrificed their interests deliberately for that of the water consumers of East London The witness said that they could not overlook the Act of 1855

The CHAIRMAN pointed out that this Act entitled the Lee Conservators to insist on a draught of 5,400,000 gallons a day and that they did not insist on taking this amount The witness replied that this was a question of policy to a certain extent and that rather than hamper the East London Company they had thought it better to let a few barges be grounded for an hour or two in the Navigation

The CHAIRMAN pointed out that the witness admitted then that they had sacrificed the navigation of the River Lee to the interests of the water companies The witness was unwilling to admit that they had sacrificed their interests, but said that they tried to keep the traffic of the Cut in a fair and reasonable way without denuding the water companies

In answer to the CHAIRMAN the witness said that water was raised last year by the East London Company by means of a pump which they fixed two years ago at Bow and which raised water from the Thames at Bow Creek. The water was taken at a point between Limehouse and Old Ford and the water company also put up temporary pumps to raise the water from pond to pond (The details of this were given at an earlier sitting by Mr Bryan, engineer to the East London Company)

In answer to Mr DE BOCK PORTER the witness said that there was no understanding between the Conservancy and the water companies that if they did this pumping they would be allowed to take all the water they could get

Mr DE BOCK PORTER asked what moved them to pump this water up The witness replied that the East London Company might have anticipated that if it were not pumped up some of the ponds above would be lowered.

The CHAIRMAN said he supposed the state of affairs to be this The Lee Conservators went without water which they wanted in order that the water company might be able to supply their customers and the water company pumped water from pond to pond up this Navigation so as just to enable barges to scrape through The witness admitted that this was the case

The CHAIRMAN said that it appeared that this arrangement was lubricated by a payment of £1300 a year from the water companies to the Conservancy The witness said that he did not put it in that way

The CHAIRMAN said that that was the way in which it struck him at present and asked the witness to state the matter in his own way It appeared that the Conservancy abstained from taking what they were entitled to out of consideration for the water consumers The witness said that they thought they ought to consider them

The CHAIRMAN said that doubtless the views of duty which the witness had were quite right, but what he wanted was to arrive at the fact which it appeared was that the Conservators had abstained from taking what they were entitled to out of consideration for the water consumers The witness admitted that that was the case

The CHAIRMAN said that, on the other hand, the companies taking what belonged to the Navigation obligingly pumped water from pond to pond in order to prevent stopping the waterway altogether

Mr PEMBER pointed out that under Section 31 of the Lee Navigation Act of 1855 the companies were allowed to pump water from one pond to another

The CHAIRMAN asked whether the East London Water Company provided any other sources of supply and the witness said that a certain amount was obtained from the Regent's Canal Company by means of Duckett's Canal, the amount thus received was 19,750 000 gallons This water supplied the pond above Old Ford Lock which was lower than the Regent's Canal The East London Company paid for this water which was obtained during two days in October and five days in November, 1898

The CHAIRMAN asked whether arrangements had been made for a permanent supply of water from the Regent's Canal and the witness replied that the Conservancy Board were asking the companies to make the voluntary help they were giving now of a permanent character This, however, had not yet been done

The CHAIRMAN pointed out that the Conservators were entitled to keep up the navigation and that the water companies should have their draught if they could The witness replied that they had to consider the interests of the water companies They pay the Conservators a certain amount and the Board often said, "Shall we starve East London to keep the barges afloat?"

The CHAIRMAN said he supposed that the barges were not quite so vocal as the East London consumers The witness said that they were vocal at times when they were stopped

In answer to Mr DE BOCK PORTER the witness said that

the Conservators spent £1000 a year in dealing with the pollution in the upper reaches of the river and that that sum was not sufficient for excessive law costs or to pay a very large staff The witness, however, considered that the condition of the river "as proved by analysis" had become through their exertions very satisfactory

In answer to the CHAIRMAN the witness said that there had been complaints about the stream at Stratford There were some very old mill streams there, the streams were said to be a nuisance and they undoubtedly were so They were flushed with water which had come from Lee Bridge weir A nuisance was caused by an effluent from Walthamstow, by an effluent from Leytonstone, and by the sewage from West Ham which goes into Bow Creek A nuisance was also caused by the London County Council outfall at Bow There were tide gates at Old Ford and all the back streams mixed at a common level at certain states of the tide

In answer to Major General SCOTT the witness said that they had served Walthamstow with a notice with regard to their effluent Leyton had also applied for an injunction against them and Walthamstow was now under a sequestration order of the Chancery Division of the High Court The sewage effluent from West Ham, which had a population of from 250,000 to 300,000, goes in at Bow Creek. The West Ham Corporation said that they did not pollute

In answer to Major General SCOTT the witness said that the sewage was treated by being placed in black ash waste, but that it was not put on to a sewage farm In two years' time, however the West Ham sewers would be connected with the metropolitan system The Conservancy had been at the expense of dredging in Limehouse Creek because of the deposit which had occurred there During the last three years they had spent about £1000 in this way and had removed about 10 000 tons of mud They had also dredged below the London County Council outfall for two or three years and for this work the County Council had hitherto paid, but for some reason they had objected to pay during the present year The witness understood that the County Council were getting "scientific evidence" and "expert evidence" to say that there was nothing but surface water coming out to these places, but the witness knew better than that and anyone could see it

The CHAIRMAN remarked that the Limehouse Cut seemed to be an eligible place for residence with the County Council on one side and West Ham and Stratford on the other

In answer to the CHAIRMAN the witness said that the East London Company proposed this year to make reservoirs of such capacity that they might be able to send down an extra quantity of water during a drought, using part of their reservoir capacity as a compensation reservoir, but with regard to this help from the East London Company if the Lee Conservators insisted on their legal rights and took the amount of water to which they were duly entitled there would be no need of compensation or help from any one else

The CHAIRMAN at a later part of the proceedings remarked that he did not wish to say anything against the integrity and sincerity of the Lee Conservancy Board, but it was obvious that they were dependent on the water companies

ROYAL COLLEGE OF PHYSICIANS OF LONDON

ELECTION OF PRESIDENT

AN extraordinary meeting of the Comitia was held on March 27th, Sir SAMUEL WILKS, Bart, President, being in the chair

On the nomination of the PRESIDENT Mr Charles Alfred Cripps, Q C, was elected the standing counsel of the College in the place of Mr T T Bucknill, Q C, who has been appointed one of Her Majesty's Judges

A letter was read from the Lord President of the Council asking the College to name a Fellow to represent the United Kingdom at a Congress to be held in Berlin in May to discuss "The Prevention of Tuberculosis as an Endemic Disease" The PRESIDENT nominated Dr Pye Smith, who was accepted by the College

The PRESIDENT then delivered the annual address He first intimated to the Comitia that he did not desire re-election He then referred to the principal matters contained in the registrar's report After detailing the increase or decrease in the number of the Fellows, Members, and Licentiates respectively he mentioned the Royal favours and distinctions which had been granted to Fellows during the past year He also referred to the gifts to the College, laying special stress on that given by Sir Herman Weber to commemorate his jubilee as a Fellow, and he suggested that the example was an excellent precedent to be adopted by other Fellows The lecturers then received their due meed of praise Sir Samuel Wilks also dwelt on the cordiality of feeling which existed between their College and the Royal College of Surgeons of England A proposal had been made that the College should take immediate steps to attempt to bring about an alteration in the Vaccination Act, but he thought that a year should be allowed to elapse after the passing of the Act so that more facts and statistics might be collected One of the most important matters which had been before the College was the proposal that the College should relinquish their disciplinary powers over their diplomates, but this proposal had been firmly declined The President then read obituary notices of the Fellows who had died during the past year, detailing the principal scientific, literary, and clinical achievements of each The names mentioned were seven in number —Sir William Jenner, Dr Munk, Dr C J Hare, Dr A. A Kanthack, Dr Cole (of Bath), Dr Henry Stevens, and Dr Arkle

Sir SAMUEL WILKS then delivered up the insignia of office, thanking the Fellows and more particularly the Treasurer and the Registrar for their loyalty and deference to the chair and for the continuous help which he had received during the period in which he had occupied the position of President

The election of a President was then proceeded with, the registrar having read the laws which govern the procedure The following was the result of the first ballot.—Dr Church, 60 votes, Sir William Broadbent, 56, Dr Dickinson eight, Sir R Douglas Powell, eight, Dr Hughlings Jackson, three, Dr Pavy, three, Sir Dyce Duckworth, two and Sir William Priestley, Sir E Sieveking, Dr Pollock and Dr Barlow one each A second ballot was therefore necessary between Dr Church and Sir William Broadbent, the result being that the former received 77 votes and the latter 67 Dr Church was therefore declared President of the College for the ensuing year and was installed by the Senior Censor, who delivered to him the insignia of office, and Dr Church duly "gave his faith" to the College The latter part of the election and the installation of the President were conducted under some difficulty, the electric light suddenly failing and leaving the Comitia in darkness relieved only by the glimmer of a single lamp —Dr CHURCH in a few well chosen and dignified words thanked the College for the honour which had been conferred upon him

Some formal business was then proceeded with, the chief item of which was a report from the Midwives Bill Committee Sir JOHN WILLIAMS proposed, and the SENIOR CENSOR (Dr Cheadle) seconded its reception, but discussion on the matter was postponed

Dr Corfield and Dr Poore were deputed to represent the College at the Annual Congress of the Sanitary Institute to be opened at Southampton on August 29th

The College accepted with acclamation a photo-engraving of the portrait of Dr James Andrew by Collier (presented by Dr Church) and one of Dr Munk (presented by the Treasurer)

The PRESIDENT then dissolved the Comitia.

NEW HOSPITAL FOR TOTNES —At the meeting of the subscribers of the Totnes (Devon) Cottage Hospital held on March 22nd under the presidency of the Mayor (Dr G J Gibson) the Duke of Somerset's offer of a site for a new hospital at Bridgetown was gratefully accepted, and it was decided to advertise for plans for the new building

THE LABELLING OF POISONS —At the Bristol Police-court on March 22nd a druggist was summoned for selling a preparation containing morphia without having a poison label affixed He had made up suppositories from the prescription of a medical man and as the patient knew how to use them he did not think that a poison label was necessary The magistrates inflicted a fine of £2 and costs

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD

On the Sanitary Circumstances and Administration of the Stow-on the Wold Rural District, by Dr R DEANE SWEETING [1]—Both these reports concern districts coming under inspection by the Local Government Board on account of official and other complaints of insanitary conditions allowed to persist in them Dr Sweeting sets out diverse unsatisfactory conditions which obtain in Stow on the-Wold, a rural district midway between Gloucester and Oxford, in area some 12 miles by 11, and with a population of nearly 8000 As in so many agricultural rural districts, the principal sanitary difficulty consists in providing for the larger villages at reasonable cost a sufficient and pure water service and satisfactory means of disposal of sewage and excrement The agricultural village of Bourton on the Water, for instance, with 254 inhabited houses, lies on the flat and is built upon a superficial layer of gravel overlying an indefinite thickness of impervious lias clay Most of the houses have good areas of garden ground belonging to them and each gets its water from a shallow well If excrement and slop water could have been reasonably disposed of on the surface of the garden soil little objection on the score of quantity or of quality would probably need to have been taken to the use of water from wells of this sort But, thanks to the privy pits, cess pools, and rubble drains the water of nearly all the wells has long been liable to dangerous pollution, while the prevailing methods of excrement disposal have given rise to nuisance. Remedy has lately been sought by the provision of sewers and by the introduction of water closets, but, as might have been expected, sewerage by itself has brought little sanitary advantage to the village There is no water available for flushing the water closets or for scouring out a series of sewers which are laid at low gradients The so-called water closets have become as objectionable as the privies were formerly, and now, however much the quality of the well water may be bettered, it becomes imperative to obtain a public supply under pressure Unfortunately, the difficulties at Bourton on the Water in obtaining the needed supply at a cost such as is reasonable to incur in the case of villages of this kind seem to be considerable Dr Sweeting draws attention to the anomaly in the sanitary administration of the Stow on the Wold rural district presented by the existence of two medical officers of health, neither of whom comes into personal relation with his fellow health officer or with the district council In view of the experience of other and larger rural areas this arrangement can hardly be justified on the score of the size of the district, and on no other ground can it be considered desirable It has evidently served as an excuse for the poorness of the salaries—£22 per annum—paid to each officer Apparently in this district one of the principal qualifications required from a medical officer of health is a convenient reticence Dr Sweeting gives an account of an endeavour by the district council to dismiss from office Dr Corser who in the performance of his duty had called public attention to questions of polluted water supply

On the Sanitary Circumstances and Administration of the Borough of Christchurch, South Hants, by Dr MIVART [2]—Questions of sewerage of pollution of rivers, and of water-supply have become important in the ancient borough of Christchurch in Hampshire It is doubtful whether in the interests of the health of its inhabitants this district ought to continue in its otherwise laudable policy of securing an insignificant district rate and of refusing to incur any debt for public works Dr Mivart points out the need of a proper system for disposal of sewage which at present is discharged in crude state into the rivers Stour and Avon or into ditches and watercourses connected with them or with the Christchurch estuary This need is greater owing to the probability that Christchurch will as years go on have more and more an urban character The shallow-well water of Christchurch is in many cases unsatisfactory There is, however, an alternative supply available in the waterworks of the West Hampshire Water works Company But the supply of this company is obtained by pumping from the Avon at a point above Christchurch and there appear to be several opportunities of pollution of this river by sewage at points not far above the intake Hence the purity of the West Hampshire water depends almost entirely upon the efficiency of the filtration which it undergoes before reaching the consumer Dr Mivart gives some account of the method of filtration employed He points out that it is generally understood that several members of the Christchurch District Council are financially interested in the undertakings of this water company and he recommends the sanitary authority to take independent expert advice on the quality of water thus provided

[1] London, Eyre and Spottiswoode, East Harding-street Edinburgh John Menzies and Co Dublin, Hodges, Figgis, and Co
[2] Ibid.

REPORTS OF MEDICAL OFFICERS OF HEALTH

Harrow Urban District—Dr John Fletcher Little expresses the opinion that no milk should be allowed into a district unless the receptacles containing it be sealed and accompanied by a certificate from the medical officer of health of the district in which the milk is produced We presume that Dr Little intends to suggest that all cowsheds, cows &c, shall be under medical and veterinary supervision and not that a medical officer of health shall give a separate certificate with each daily supply He urges the Harrow District Council to provide public slaughter houses, to enforce the regulations which they have apparently made under the Dairies, Cow sheds, and Milkshops Order, to apply the tuberculin test, and to make tuberculosis notifiable The quality of the Colne Valley water was not during 1898 entirely satisfactory and Dr Little states that at times the water contains matter in suspension Apparently the water company have not in the past afforded Dr Little opportunities for collecting samples for analysis

Swinton and Pendlebury Urban District—Enteric fever is apparently endemic in the Pendlebury portion of this Lancashire district, and Mr Samuel Hosegood in commenting upon this fact points out that as from 18 to 20 per cent of the cases occur among young men who are colliers the disease must often be contracted in the mines through the methods of excrement disposal there adopted This expression of opinion is of interest and we should much like to see a full inquiry made into the methods of excrement disposal in vogue in coal and other mines The Medical Department of the Local Government Board might very well undertake such an inquiry

Aston Manor Urban District—The sanitary authority of this district has recently procured a site for the erection thereon of a small pox hospital, and Mr Francis May, the present medical officer of health, expresses the opinion that the operations of the new Vaccination Act, together with the large number of children who are vaccinated in only one place, will all tend towards the production of severe epidemics of small pox in the future He trusts, therefore, that the district council will consider the provision of a small pox hospital a matter of urgency

West Hartlepool Urban District—Dr S Gourley reports that the new Vaccination Act has up to the present been productive of harm rather than of good, inasmuch as it has led to a diminution in the number of children vaccinated in this district 83 parents had been, at the time Dr Gourley's report was written, granted certificates under the conscience clause of the Vaccination Act Dr Gourley thinks that we are at the beginning of a period of panic vaccination and that the so called "conscientious objectors" will rush to be vaccinated immediately small pox appears Let us hope that the Government vaccine laboratory may prove equal to the occasion

Huddersfield Urban District—In his report for this district for the last quarter of 1898 Mr E G Annis furnishes an outline of the steps which have been taken for the control of tuberculosis The veterinary surgeons have been asked to notify to the corporation all cases of tuberculosis occurring either within the borough or in cows supplying milk to the borough, a fee of 1s being paid for each such notification Where there is doubt as to the nature of the malady in milch cows the tuberculin test is to be applied and a fee of 2s 6d is to be paid to the veterinary surgeon performing the operation We are told that the veterinary surgeons are

coöperating with the corporation and that many of the cow keepers are voluntarily submitting their cows to the tuberculin test Cattle which are found to react to the test are separately housed and sold to the butcher as early as possible.

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 6211 births and 5061 deaths were registered during the week ending March 25th. The annual rate of mortality in these towns which had increased in the five preceding weeks from 19 5 to 23 3 per 1000 declined again last week to 23 1 In London the rate was 23 2 per 1000 while it averaged 23 1 in the 32 provincial towns The lowest death rates in these towns were 13·2 in Cardiff, 16 1 in Huddersfield, 17 4 in West Ham, and 18 0 in Bristol, the highest rates were 28·0 in Salford, 29 4 in Wolverhampton 32 9 in Oldham, and 33 5 in Manchester The 5061 deaths in these towns included 397 which were referred to the principal zymotic diseases against 409 and 417 in the two preceding weeks, of these 154 resulted from whooping-cough, 91 from measles, 81 from diphtheria, 31 from diarrhœa 20 from "fever" (principally enteric), and 20 from scarlet fever The lowest death-rates from these diseases were recorded in Croydon, Birmingham, Oldham, and Newcastle-upon Tyne, and the highest rates in West Ham, Plymouth, Derby, and Salford. The greatest mortality from measles occurred in West Ham, Bolton, Manchester, Salford, and Newcastle-upon Tyne, from scarlet fever in Derby, from whooping-cough in Plymouth, Cardiff Birkenhead and Preston, and from "fever" in Wolverhampton. The 81 deaths from diphtheria included 37 in London eight in Sheffield, seven in Leeds, six in Leicester and three in Portsmouth. No fatal case of small pox was registered last week in any of the 33 large towns, and only one case of small-pox was under treatment in the Metropolitan Asylums Hospitals on Saturday last, March 25th The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2355 against 2584, 2540, and 2437 on the three preceding Saturdays, 177 new cases were admitted during the week, against 238, 217, and 224 in the three preceding weeks The deaths referred to diseases of the respiratory organs in London which had been 529 and 565 in the two preceding weeks further rose last week to 604 and were 154 above the corrected average The causes of 62, or 1 2 per cent, of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in Portsmouth, Cardiff, Bradford, Leeds and in 14 smaller towns, the largest proportions of uncertified deaths were registered in Swansea, Leicester, Nottingham, and Halifax.

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns which had declined in the three preceding weeks from 25 1 to 21·0 per 1000, rose again to 21 8 during the week ending March 25th, but was 1 3 per 1000 below the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 13 5 in Paisley and 16 6 in Dundee to 24 8 in Aberdeen and 27 3 in Greenock The 666 deaths in these towns included 22 which were referred to whooping-cough, 21 to measles 12 to diarrhœa, six to scarlet fever four to "fever," and two to diphtheria. In all, 67 deaths resulted from these principal zymotic diseases, against 67 and 90 in the two preceding weeks These 67 deaths were equal to an annual rate of 2 2 per 1000 which was 0 4 above the mean rate last week from the same diseases in the 33 large English towns The fatal cases of whooping-cough which had declined from 31 to 27 in the three preceding weeks, further fell to 22 last week, of which nine occurred in Glasgow, four in Edinburgh and four in Leith. The 21 deaths referred to measles showed a decline of 13 from the high number in the preceding week and included seven in Glasgow, six in Edinburgh, and six in Aberdeen The fatal cases of scarlet fever which had been five in each of the three preceding weeks were six last week, of which two occurred in Glasgow and two in Aberdeen The four deaths referred to different forms of "fever" showed a decline of two from the number recorded in the preceding week, and included two in Glasgow The deaths from diseases of the respiratory organs in these towns, which had been 172 and 138 in the two preceding weeks, rose again to 151 last week, but were 24 below the number in the corresponding period of last year The causes of 30, or more than four per cent., of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death-rate in Dublin which had been 28 5 and 32 4 per 1000 in the two preceding weeks declined again to 31 9 during the week ending March 25th. During the past four weeks the rate of mortality in this city has averaged 31 2 per 1000, the rate during the same period being 23 0 in London and 21 5 in Edinburgh The 214 deaths registered in Dublin during the week under notice were within three of the number in the preceding week, and included eight which were referred to the principal zymotic diseases against numbers declining from 17 to 12 in the three preceding weeks, of these, four resulted from "fever," two from whooping-cough, one from diphtheria, and one from diarrhœa, but not one from small-pox, measles, or scarlet fever These eight deaths were equal to an annual rate of 1 2 per 1000, the zymotic death rate during the same period being 2 1 in London and 2 4 in Edinburgh The fatal cases of whooping cough which had been five and 10 in the two preceding weeks declined again to two last week. The mortality from diphtheria showed a decline from that recorded in the preceding week, while that from "fever" showed an increase The 214 deaths in Dublin last week included 39 of infants under one year of age and 60 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons slightly exceeded the numbers recorded in the preceding week Nine inquest cases and seven deaths from violence were registered, and 74, or rather more than a third, of the deaths occurred in public institutions The causes of 13, or more than six per cent of the deaths in the city last week were not certified.

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

FLEET SURGEON JOHN BELLHOUSE BOWDEN TRIGGS has been placed on the Retired List of his rank at his own request

ROYAL ARMY MEDICAL CORPS

The following officers embark for England in the transport *Simla* Majors A H Keogh, W O T Poole, and C H. Melville and Captains E M. Pilcher and N Tyacke Major B M Skinner has joined for duty in the Home District. Majors J S Davidson and E Butt and Lieutenant J Cowan have embarked for India.

INDIA AND THE INDIAN MEDICAL SERVICES

The following officers on arrival from England have been posted as follows Lieutenants H G Martin R.A.M C, and F F Carroll R A.M C to the Mhow District, and Lieutenant N H Ross, R A M C, to the Poona District

THE CAMPAIGN IN UGANDA.

We have received the following particulars of the operations in Uganda in a letter from a correspondent serving in that country The date of the letter is Dec 20th, 1898.

The mutiny of the Soudanese troops in Uganda, for the suppression of which the 27th Bombay Light Infantry (1st Baloochi Battalion) was sent from India at the beginning of 1898, is drawing to a close The campaign has been a lengthened one owing to the huge tract of country over which operations had to be carried out to the density of the jungle which effectually hides a flying enemy only a few hundred yards away and to the difficulty of manœuvring in the swampy country during the rainy season The principal engagements in which the 27th Bombay Light Infantry have taken part are as follows —

Mruli, April 26th —Attack on mutineers fort on the east bank of the Nile British loss 43 killed and wounded, of whom the 27th Bombay Light Infantry lost five killed and 13 wounded Enemy's loss unknown The fort was rushed and burnt and the British force had to return as darkness came on In this engagement Captain Standage I M S, distinguished himself by twice carrying back wounded men and

by his attention to the wounded under fire His services were mentioned in despatches to India

Jaruba, August 4th —Attack on and capture of the mutineers' fort British loss two killed and five wounded Enemy's loss 75 killed, wounded unknown. *Major Price* acted most gallantly in the night attack on a hill picket With only two sepoys to support him he rushed into the midst of the enemy, shooting down six with his own hand

Kitabu, Oct 10th —British loss 13 killed and nine wounded Enemy's loss over 50 killed, the wounded were carried away The enemy, numbering about 400, surprised a small party of 30 under Lieutenant Hannyngton Lieutenant Hannyngton was wounded in two places and had marks of four bullets on his clothes

Nakitoma, Oct 27th —British loss two killed and four wounded Enemy's loss 150 killed and wounded, many of whom were Uganda allies of the mutineers The enemy was attacked in a fort but ran from it

Kifingute, Nov 25th —British loss *nil* Enemy's loss small They ran when firing began After this engagement a lot of prisoners were taken and about 40 men gave themselves up On Dec 6th Bilalamin Effendi, the leader of the mutineers, was killed by a sepoy of the 27th Bombay Light Infantry It is probable that many more mutineers will now give themselves up The supply of chloroform, drugs, antiseptics, and medical comforts is sufficient, and all the sick and wounded have done well, though the transport to Kampala, the base in Uganda, is effected entirely by coolies and is none too comfortable A terrible loss was sustained by the burning of all the hospital drugs and stores They were struck by lightning on Sept. 1st, but fortunately the reserve stores were close up on the road from Mombasa and though the field equipment is missing there is a sufficiency of all requirements A large number of the wounds were made by Lee Metford solid bullets and our medical officers' experience of bullet wounds has been increased by large numbers of the enemy's wounded brought into hospital The medical officers with the force are Major S T Avetoom, I M S, S M O, and in charge of the 27th Bombay Light Infantry, and Captain R F Standage, I M S, in charge of No 46 O Native Field Hospital, with a large staff of hospital assistants

THE LATE ADMIRAL SIR WILLIAM MENDS, G C B

The late Sir William Mends, in addition to having held many important posts in the navy and having greatly distinguished himself on several occasions by his enterprising pluck, was a good friend of the medical departments of the navy and army His son who was a naval medical officer but who retired in 1894 has just published his father's memoirs The late Sir William Mends was for a long time Director of Transports and he organised the Indian troop service system which continued in operation for a good many years, but which has now been replaced by another service He gave most effectual aid to the Army Medical Service in fitting out hospital ships for various expeditions, especially in the case of the *Victor Emmanuel* for the Ashanti Expedition under Sir Garnet (now Lord) Wolseley The late Professor Parkes declared at the time that it was the best hospital ship which had ever been sent out from this or any other country

DEATHS IN THE SERVICES

Surgeon Major General William Marshall Webb (retired), at Cairo on March 18th at the age of 65 years The late officer was, it will be remembered, for some years stationed at Netley and did much service in connexion with the hospital and the Army Medical School there He subsequently served as Principal Medical Officer at Bombay He was a son of the late Captain J W Webb, 79th Highlanders He served with the 19th Regiment throughout the Crimean campaign and was present at the battles of Alma and of Inkerman, and also at the siege of Sebastopol (medal and three clasps and the Turkish medal) He became Surgeon in 1864, Surgeon Major in 1873, Brigade Surgeon in 1879, Deputy Surgeon General in 1881, Surgeon Major General in 1887, and was placed on the Retired List in July, 1893

READING MATTER FOR SICK SOLDIERS

The following letter has been published in the press —

"I hope you will allow me to ask those of your readers who may be interested in the British soldier to kindly send newspapers, periodicals, &c, for the use of the sick and convalescent soldiers in the Station Hospital at Meean Meer Punjab The soldiers fully appreciate anything done in this way for their recreation and benefit and I shall be glad if these could be sent from time to time addressed to me

"I am, Sir, your obedient servant,

"W D MILLER, M D,

"Lieutenant Colonel Royal Army Medical Corps

"Meean Meer, Punjab, March 8th.

THE INCREASE OF THE NAVY

The increase of the navy will of course entail a considerable augmentation in the way of wages, victualling, hospital establishments, and so forth The additions to the lists of medical officers and other branches of the naval service are to be made gradually The Naval Medical Service appears to be a popular one It may have some grievances but everything is relative in this world and naval medical officers generally are contented with their service and position

Sir H F Norbury, K.C B, Director General of the Medical Department of the Royal Navy, has visited the *St Vincent* (training ship for boys) at Portsmouth in reference to the outbreak of influenza in the ship On the same occasion he went to Haslar to see the boys who have been removed to hospital

Correspondence.

"Audi alteram partem."

"CERTAIN ORGANISMS ISOLATED FROM CANCER AND THEIR PATHOGENIC EFFECTS UPON ANIMALS"

To the Editors of THE LANCET

SIRS,—Mr H G Plimmer in summing up an account of his experiments on the above subject[1] says that the important point of his work is "the experimental production of malignant tumours in animals by an organism isolated from a malignant tumour in man" May I be allowed to point out that Mr Plimmer does not prove in his paper that malignant tumours have been so produced? He asserts that he has obtained pure cultures of "parasites standing in causal relationship" to cancer Of nine experiments recorded in proof of this statement four showed no result, in two cases the animals died, pure cultures of the "organisms" were obtained from various tissues, and it is not stated whether tumours were found or not

In two cases cultures were injected into the peritoneal cavities of guinea pigs Death followed after 20 days and 17½ days respectively In each case numerous new growths were found in the peritoneum and other parts and the abdominal glands were enlarged There is, however, no assertion that the new growths were carcinomatous or malignant until the writer sums up his conclusions Sections showed "new growths of an endothelial nature" These two experiments seem to me to have little or no value as proofs of Mr Plimmer's contention without a full description of the macroscopic and microscopic characters of the tumours induced and his conclusion above quoted does not seem to be justified unless experts in microscopy agree that these tumours are malignant

In experiment No 4, both corneæ of a rabbit were scraped and the "sediment of a 10 days old culture" was rubbed over them The rabbit was killed 48 hours later and Mr Plimmer records that "there was considerable proliferation of the corneal epithelium which had forced its way into the subjacent tissue The organisms were found in the epithelial cells after fixing and staining, with appearances similar to those of the inclusions in cancer cells, as described by Ruffer and myself" At the end of his paper Mr Plimmer refers to "tumours" being produced, "so far, with one exception of endothelial origin," and he says that "No 4 (the corneal experiment) is the only one in which an epithelial surface was tried" When an investigator professes to recognise tumour growth in the cornea of a rabbit killed 48 hours after the cornea had been scraped and rubbed with a culture which the experimenter believes to be capable of inducing cancer I submit that the conclusions arrived at and all the evidence adduced should be examined with the greatest care It seems to me unjustifiable to assert

[1] THE LANCET March 25th 1899

positively that there was or was not a malignant development in the corneæ under the circumstances stated in experiment No 4 Mr Plimmer's two cases of tumour formation in the peritoneum and elsewhere would seem to me to prove his case if the developments which he calls "tumours" were shown to be malignant, but unless there are much better reasons for so describing them than there are for asserting that tumour growth existed in the corneæ in case No 4, the evidence brought forward in THE LANCET forms no logical basis for the conclusion arrived at No reasons for believing these tumours to be malignant are given The presence of bodies which in Mr. Plimmer's opinion are parasitic does not prove his thesis unless he can show beyond dispute that malignant tumours were also developed.

There is no doubt that the corneæ in case No 4 were very greatly irritated In the first of the experiments in which peritoneal "tumours" were induced (case No 8) "10 cubic centimetres of a three weeks old culture" were injected. The origin of the cultures used in these two cases is not more particularly stated In the second case in which peritoneal "tumours" were induced (No 9) a culture was used from the abdominal glands of a guinea pig (Case No 8) which had died 20 days after being experimented on It is important to know whether the culture used in each case was made from a body which had died from disease or from a freshly removed tumour, but this information is wanting It seems to me that Mr Plimmer has not only omitted to give sufficient evidence to prove the conclusion which he confidently adopts, but he has also failed to defend himself from the obvious suggestion that the phenomena he observed were of inflammatory origin

I am, Sirs, yours faithfully,

Portman-street W., March 25th, 1899 JOHN D MALCOLM

LOCK HOSPITALS AND LOCK WARDS

To the Editors of THE LANCET

SIRS,—The matter referred to in the annotation in THE LANCET of Feb 25th and in the letter of your Liverpool correspondent in THE LANCET of March 4th respecting the closing of the local lock hospital is only a part of a very wide question That venereal diseases ought to be both studied and treated goes without saying, that men, women, and children infected with syphilis through no fault of their own are deserving of charity is equally clear And yet it was calmly proposed to close one of the only six lock hospitals in the United Kingdom and it has been closed It may, perhaps, assist in explaining the reason which has led to this if those who are in a position to do so will explain the following facts There were formerly beds for females suffering from venereal diseases in the following six metropolitan hospitals to the number given against each Guy's, 30, King's College, 6, Royal Free, 30, St Bartholomew's, 50, St. Thomas's, 30, and Middlesex, 8, or six lock wards containing 154 beds for females only Those of Guy's King's College, and Royal Free Hospitals have all been closed as lock wards and are, I presume, occupied by medical or surgical cases The 50 beds in St. Bartholomew's Hospital have been reduced to 14, those in St Thomas's Hospital to 28, and those in the Middlesex Hospital from eight to seven So far as I am aware there are no lock wards in the Charing Cross, St George's St. Mary's, University College, or Westminster Hospitals The London Hospital has a lock ward with eight beds for females During the years which have passed since these changes were made the population of London has continued to increase to such an extent that London and Middlesex will soon be coterminous From what appears in THE LANCET and other medical papers it is manifest that syphilitic and other venereal diseases are not diminishing either in frequency or in severity, while to judge from the daily papers the social evil is in some localities more rampant and aggressive than it has ever been

The sensation caused by the description of those soldiers who were sent to Netley Hospital from India invalided for syphilis has not passed away and it is an open secret that the present Government will be petitioned to appoint a Royal Commission or Select Committee to inquire into the prevalence of these diseases with a view to their prevention Should the petition be granted the facilities for treating these diseases must become part of the reference and what a revelation it will be In this year 1899 the only Liverpool hospital for the reception of these diseases has been closed In London the Female Lock Hospital has two wards containing 40 beds closed for want of funds In addition to this there are 57 beds for women in the four hospitals—St Bartholomew's, St Thomas's, the London, and Middlesex. Who are to be blamed—the members of the medical profession, the managers of the hospitals, the general public, or all three? Is it another illustration of the old saying, "What is everybody's business is nobody's business"? There are, it is true, facilities for the treatment of these diseases in the out-patient departments of the Lock Hospital in Dean street, Soho, and in all the general hospitals The experience gained there by students under a capable teacher is most valuable But the outdoor treatment of such cases is too often most unsatisfactory and there are some cases which can only be properly treated as in patients For these there should in such a city as London be ample accommodation in the lock hospitals of Dean street and Harrow-road and in every one of the 12 general hospitals The difficulties of establishing and supporting special lock hospitals are so insuperable that lock wards as part of general hospitals are preferable They should be under the charge of special surgeons who should give clinical lectures which students should be required to attend All the existing lock hospitals should be strengthened by more liberal support and in all cities and towns where there is no lock hospital a lock ward should be opened in the county town or city I trust that those readers of THE LANCET whose experience is greater than mine will support me

I am, Sirs, yours faithfully,

Liverpool, March 20th, 1899 FRED W LOWNDES.

"A CASE OF TUBAL GESTATION WITH RUPTURE AND FATAL HÆMORRHAGE AT A VERY EARLY PERIOD OF PREGNANCY"

To the Editors of THE LANCET

SIRS,—The case recorded by Dr Lucas Benham in THE LANCET of March 25th is one of very great interest and is a very good example of the early rupture of a tubal gestation which Mr J W Taylor especially called attention to in his Ingleby Lectures of last year

The condition would appear to be commoner than is generally supposed and Mr Taylor records a number of cases of the kind A specimen which must bear a very close resemblance to that of Dr Benham's is in the museum of University College It consists of the uterus and appendages of a young woman who is said to have menstruated three weeks previously, the right Fallopian tube at about one inch from its abdominal end is dilated into a small cyst half an inch in diameter, forming the sac of a ruptured tubal gestation The patient, an unmarried nullipara, died from hæmorrhage within a few hours It would be interesting to know if the condition of atrophy of the tube which Mr Taylor is inclined to regard as the cause of the early rupture is present in Dr Benham's specimen or not

I am, Sirs, yours faithfully,

Wimpole-street W., March 28th 1899 G F BLACKER.

"THE DIASTOLIC MURMUR OF MITRAL STENOSIS"

To the Editors of THE LANCET

SIRS,—Dr Bertram Hunt's article on the above subject in THE LANCET of March 25th is of much interest and though the conclusions which he draws will demand more extensive clinical evidence for their establishment yet they will, I think, commend themselves to the experience of many who have interested themselves in the murmurs of mitral constriction One or two points I would accentuate In the first place I quite agree with Dr Hunt when he says that the early diastolic murmur of mitral stenosis is always preceded by a systolic brut and that in this fact of the invariable systolic accompaniment it contrasts with the presystolic murmur This, however, is a matter of observation pure and simple and it remains to be seen whether the statement will hold without exception Next as to the mode of origin of this murmur, he gives the simplest and as I believe the correct explanation of the manifestation Dr Hunt puts this so very briefly that perhaps I may be excused for dwelling further upon it Before the occurrence

of regurgitation the rise in the intra auricular pressure will go on increasing up to the moment of the relaxation of the ventricle. At that moment the auricle will begin to unload itself across the constricted valve, but the driving force being no greater than the pulmonary vein pressure this in a majority of cases will be insufficient to produce an audible bruit and for the development of a murmur we have to wait till the auricular constriction adds the necessary impulsion When, however, mitral regurgitation sets in the auricle fills both from the pulmonary veins and from the left ventricle The distending force of the ventricular systole will greatly exceed that of the pulmonary veins and the result will be such a filling and stretching of the auricle that when the ventricular diastole sets in the elastic recoil will, as Dr Hunt says, suffice to drive the blood back into the ventricle with a sound This early diastolic bruit will thus be the exact counterpart in a sense of the early diastolic aortic bruit, the cause of which is the stretched aorta I have always been accustomed to contrast the early diastolic bruit of *mitral constriction with the presystolic bruit—as, the one* a bruit of physical origin, viz, of elastic recoil, the other a bruit of physiological origin, viz, muscular contraction I am very glad to see that Dr Hunt does not invoke the aid of that very embarrassing gift of the physiologists, the negative pressure in the expanding ventricle This aid to the circulation is there, I suppose, to assist the ventricle, but as a matter of fact if it exist it will have been generated by the ventricular contraction and by it alone But why this heresy, Dr Hunt neither invokes nor provokes it

I am, Sirs, yours faithfully,

HARRINGTON SAINSBURY

Welbeck street W March 27th, 1899

ERYTHROL TETRANITRATE

To the Editors of THE LANCET

SIRS,—An accident by which a chemist lost his life happened at a tabloid factory at Dartford on Dec 15th, 1897 He was engaged in mixing tetranitrate of erythrol with finely powdered lactose in a mortar when an explosion occurred. Again, at the end of 1898 an accident was caused by tetranitrate of erythrol being inadvertently thrown into a fire and one person was injured Tetranitrate of erythrol is possessed of explosive properties and is highly sensitive, more so, indeed, to percussion than dynamite or gun-cotton As it has lately come into some use in the place of nitroglycerine as a remedy for angina pectoris I should be glad if you would draw special attention in THE LANCET to the dangers attending the handling of this drug

I am, Sirs, yours faithfully,

A FORD,

Colonel Her Majesty's Chief Inspector of Explosives.

Home Office, Whitehall, S.W, March 24th, 1899.

"DIFFICULTIES UNDER THE NEW VACCINATION ACT"

To the Editors of THE LANCET

SIRS,—In face of the ever-increasing difficulties and the invidious criticism which confront the justice or magistrate whenever he has judged it right to refuse an exemption certificate in accordance with the discretionary power vested in him by the so-called "conscience clause," might it not be possible to provide every magistrate with a well considered formulary of test questions whereby he could practically sift the worth or worthlessness of each applicant's *conscientious* objections? Would it not be expedient during the time the Act remains in force for the medical profession to frame such a schedule of test questions for the use of magistrates in examining the validity of exemption claims? Medical opinion is so solid as regards both the efficacy and safety of vaccination that it surely would be possible so to frame a formulary of non technical test questions to be asked of each applicant as to disprove the alleged ill-effects following vaccination and at the same time convince by demonstrable evidence the magistrate—and perchance even the applicant—that the objections raised could not be substantiated when subjected to expert investigation, that is to say, expert so far as the magistrate would then be enabled to review the probabilities and possibilities of given statements by the light of medical opinion Such a course would vastly relieve the magistrate of the onerous task imposed upon him and would serve greatly to remove the mistrust provoked in the public mind by the hirelings of the Anti Vaccination League

I am, Sirs, yours faithfully,

Windsor, March 25th, 1899. W LISLE GOODRIDGE

To the Editors of THE LANCET

SIRS,—The ventilation of this subject in your columns and at meetings of medical societies seems to have brought out the fact that we have in the New Vaccination Act increased powers to secure the efficient vaccination of most of the babies born this year and henceforward With the public vaccinator, bound to make four insertions and to obtain a minimum scar area, and the vaccination officer, unhampered by a board of guardians, behind us we should be able to persuade most parents (*pace* "P P") to let us do our duty to the public by vaccinating their children properly before they are four months old At the last meeting of the Plaistow Medical Society, after an account of the new Act had been given by the public vaccinator for the district, the following resolution was passed: "That vaccination should be performed with calf lymph and that not less than three insertions should be made"

This is only a pious opinion and does not set a very high standard, but, considering that the "one-small place-for a shilling" game (to call it by no worse name) has so often and so recently been played here and that vaccination reform must spring from, and be fostered by, the medical profession, it is at least an apology, an appeal, and a challenge

I am, Sirs, yours faithfully,

HON SEC PLAISTOW MEDICAL SOCIETY

March 27th, 1899

To the Editors of THE LANCET

SIRS,—In reply to Mr Blaker I never said "I considered it offensive, undignified, unprofessional, or irksome to arrange with my own patient for vaccinating his child." He leaves out the very important words "without being sent for or consulted," which is a very different matter On the contrary, should the parent call or send for me I should be very happy to arrange it I repeat it is no part of my duty to call unasked to vaccinate and would also be every one of the adjectives he quotes Some patients are never seen from one confinement to another, another medical man, perhaps, attending for sickness, some may take an aversion to their accoucheur and vow they will never have him again, some may avail themselves of the services of the public vaccinator for economy's sake, the babies of a fourth series might not be very well at the time of the visit but not thought sufficiently ill to call in a medical man, a fifth series may object to vaccination Supposing one did call, the visit, being paid, may necessitate several others, say, in postponement, as if you accept responsibility in the one you must do so in the other All these visits have to be charged for, that being so I repeat that one might be taxed with touting, especially by the parents of the first three or the medical men whose services are substituted Your correspondent "Fairplay" not succeeding in proving his assertion as to the private attendant's obligation to carry out the law, shifts his ground and questions if it is not always the duty of the medical attendant to safeguard his patient I sometimes hear from outsiders that the children of patients of mine are ill with measles scarlet fever, &c, and that the parents are doing without medical attendance I do not consider it my duty to call and warn them of the risk and "offer my services" to safeguard the case Our own patients are only our patients when they request our services and then only our responsibility begins, till that time they are free agents with their own responsibilities, being never at any time our property This very new duty as laid down by your two correspondents will not, I think, be accepted by family practitioners If we began to do so our reception in time might rival that of "P V" in your issue of Feb 18th and our "self importance" (self respect is a better word) suffer Both your correspondents have taken up a perfectly untenable position, but, seeing that public vaccinators are likely to find a Scylla, advocate a line of practice to private practitioners where they would probably find a Charybdis I may say that this new version of our duty seems to have extended itself to vaccination officers I received to my surprise the other day per post the certificate of a child whose vaccination I had postponed, the time being up to the day I need hardly say I sent it back to him to see after himself

I am, Sirs, yours faithfully,

March 25th, 1899. GENERAL PRACTITIONER.

"INTRAVENOUS INJECTIONS IN SYPHILIS"

To the Editors of THE LANCET

SIRS,—Mr Chopping's answer[1] to my letter in THE LANCET of March 4th does not appear to me to be complete This may be due to my objections to the intravenous treatment not having been put clearly enough My contentions are as follow 1. The intravenous injection of mercury has not been proved to have any advantage over other methods as regards either rapidity of disappearance of symptoms or convenience 2 It is obvious that in private practice it is almost impossible to carry it out even if the patient consented—which is very doubtful 3 Mr Chopping says in his letter that "we are only able to judge of effect by quantity administered" and hence "it is very important to know if possible the exact quantity of mercury introduced into the circulation" In answer to this I would venture to state that if symptoms of mercurialisation were the same in all individuals, such measurement of the dose administered would be scientific But, as we know very well, there are very great differences in the way different persons react to mercury, and our only guides in its administration are the symptoms produced, together with the rapidity of disappearance of syphilitic lesions The same dose of mercury administered in whatever way will not cause the same effect in all patients, and therefore I consider the exact dosage to be of minor importance

I am, Sirs, yours faithfully,

Finsbury-square E C., March 24th 1899 C F MARSHALL

PUERPERAL FEVER AND NOTIFICATION

To the Editors of THE LANCET

SIRS,—The enclosed slip has been issued to all medical practitioners in this city, and is now attached to all books of notification forms issued—as a help in deciding the meaning of the term "puerperal fever" for notification purposes

I am, Sirs, yours faithfully,

D S DAVIES,
Medical Officer of Health

Public Health Department Prince-street, Bristol,
March 27th, 1899

[INCLOSURE.]

CITY OF BRISTOL.

THE INFECTIOUS DISEASE (NOTIFICATION) ACT 1889

Puerperal Fever

A Committee of the Royal College of Physicians of London has recently endorsed the view that the expression puerperal fever" should be taken to include septicæmia, pyæmia, septic peritonitis, septic metritis, and other acute septic inflammations in the pelvis occurring as the direct result of childbirth."

The Council of the Obstetrical Society of London suggests the following inclusive definition of the term "puerperal fever" That is "Septicæmia and pyæmia, including peritonitis and all cases of acute pelvic inflammation occurring in connexion with childbirth."

Issued for the information of medical practitioners.

D S DAVIES M.D
Medical Officer of Health.

Public Health Offices, 40 Prince-street, March, 1899

"THE HEALTHIEST CITY IN THE WORLD"

To the Editors of THE LANCET

SIRS —Englishmen are apt to believe that there is no place like England for the English people and that when the race is propagated outside the English shores it degenerates Now the English race has ousted the aboriginals and has taken possession of Tasmania for just about a century and a great part of our people are native-born from British parents, yet I throw down the challenge to those who hold the above views to beat the following figures The population of Hobart and its suburbs is 40,500 During the last year 561 people died, or about 14 per 1000, but of this number 385 were over 65 years of age, or 9 50 per 1000 of the total deaths, which leaves only 4 50 per 1000 for deaths from all other causes—such as infancy, accidents, &c As an officer of health for one of the suburbs I take a great interest in these figures and would like to hear if they can be beaten by any other British town Especially my challenge is upon only 4 50 deaths per 1000 under 65 years of age *En passant* we have no system of deep drainage, excreta being removed once a week in pans

I am, Sirs, yours faithfully

Hobart, Feb. 16th, 1899. HARRY BENJAFIELD, M B

[1] THE LANCET March 18th, 1899 p. 785.

THE WOUNDED DERVISHES AT OMDURMAN

To the Editors of THE LANCET

SIRS,—As it is impossible to reply to assertions made in the lay press will you allow me, as one who passed over the battle field immediately in the rear of the British troops after both engagements, to contradict most emphatically the assertion that no aid was given by our medical officers to the wounded Dervishes? As far as we were able during the brief halts which took place on our march into Omdurman every assistance that could possibly be given with due regard to the needs of our own men was freely rendered by my field hospital and by the medical officers who were in charge of the stretcher-bearers and camel cacolêts Whenever we halted for any space of time and none of our own people claimed our attention my men were constantly giving water and extemporising dressings (often at great personal risk) to the many wounded Dervishes who lay about Moving slowly, as we were compelled to do, having so many stretcher cases to take into Omdurman, I had the fullest opportunities of seeing the behaviour of the Egyptian native servants and saises towards the wounded, and only on one occasion did I see anything approaching "harsh" treatment adopted towards the wounded, and that was when a Dervish deliberately hurled a spear at an officer of the Royal Army Medical Corps who had been a moment before giving him water

I am, Sirs, yours faithfully,

M O IN CHARGE OF NO 1 FIELD HOSPITAL

March 27th, 1899

VACCINATION AND SMALL-POX IN RANGOON

To the Editors of THE LANCET

SIRS,—Appended you will find an extract from a letter from my brother in Rangoon which may interest you It is about the epidemic of small pox at present raging in Rangoon "I wish some of your conscientious objectors at home were here during the present epidemic to see the effects of vaccination Not a living soul in Rangoon who has been vaccinated comparatively recently—say, within the past five or seven years—has had anything worse than a very mild attack, while dozens are dying every day from it, and yet lunatics at home resist vaccination I have had much trouble with our men, many of whom refused to be vaccinated, so one day I made arrangements with the medical man and when he came I locked the doors and saw that every man unprotected either by recent vaccination or by inoculation (the desperate native method) had to choose between vaccination or dismissal It is tyranny, of course, but see the result We have over 150 men and with small-pox raging all round not one of them has taken it I wish all the anti-vaccinationists of the country had been in Rangoon for the past month Those who had not been converted promptly, would soon have had their toes to the daisies"

I am, Sirs, yours faithfully,

March 25th, 1899. T McC

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

A Solution of the Question of Mixed Races —The Progress of the Plague —The Steam Bath Treatment for Plague — The Government and Scientific Experiments —The Plague Commission

ALTHOUGH the Eurasian question is not a medical one it is of perennial interest to all Anglo-Indians Whatever we may think of the coarse methods and crude civilisation of the advanced guards of Russian colonisation we must admit that their solution of the question of mixed races is politically, at any rate, a most diplomatic one It is said that half-breeds are recognised as Russians, and once Russians their descendants of whatever degree are Russians also It follows therefore, that colonisation progresses and becomes founded on a sure and substantial basis In most parts of the world half castes are recognised as loyal to their superior caste authority Instead therefore of doing everything to alienate them, looking down upon them and belittling them on every possible occasion, the Russian raises all those who have Russian blood in them

of regurgitation the rise in the intra auricular pressure will go on increasing up to the moment of the relaxation of the ventricle At that moment the auricle will begin to unload itself across the constricted valve, but the driving force being no greater than the pulmonary vein pressure this in a majority of cases will be insufficient to produce an audible bruit and for the development of a murmur we have to wait till the auricular constriction adds the necessary impulsion When, however, mitral regurgitation sets in the auricle fills both from the pulmonary veins and from the left ventricle The distending force of the ventricular systole will greatly exceed that of the pulmonary veins and the result will be such a filling and stretching of the auricle that when the ventricular diastole sets in the elastic recoil will, as Dr Hunt says, suffice to drive the blood back into the ventricle with a sound This early diastolic bruit will thus be the exact counterpart in a sense of the early diastolic aortic bruit, the cause of which is the stretched aorta I have always been accustomed to contrast the early diastolic bruit of mitral constriction with the presystolic bruit—as, the one a bruit of physical origin, viz, of elastic recoil, the other a bruit of physiological origin, viz, muscular contraction I am very glad to see that Dr Hunt does not invoke the aid of that very embarrassing gift of the physiologists, the negative pressure in the expanding ventricle This aid to the circulation is there, I suppose, to assist the ventricle, but as a matter of fact if it exist it will have been generated by the ventricular contraction and by it alone But why this heresy, Dr Hunt neither invokes nor provokes it

I am, Sirs, yours faithfully,

HARRINGTON SAINSBURY

Welbeck street W March 27th, 1899.

ERYTHROL TETRANITRATE

To the Editors of THE LANCET

SIRS,—An accident by which a chemist lost his life happened at a tabloid factory at Dartford on Dec 15th, 1897 He was engaged in mixing tetranitrate of erythrol with finely powdered lactose in a mortar when an explosion occurred. Again, at the end of 1898 an accident was caused by tetranitrate of erythrol being inadvertently thrown into a fire and one person was injured Tetranitrate of erythrol is possessed of explosive properties and is highly sensitive, more so, indeed, to percussion than dynamite or gun cotton As it has lately come into some use in the place of nitro glycerine as a remedy for angina pectoris I should be glad if you would draw special attention in THE LANCET to the dangers attending the handling of this drug

I am, Sirs, yours faithfully,

A FORD,

Colonel Her Majesty's Chief Inspector of Explosives.

Home Office, Whitehall, S.W, March 24th, 1899

"DIFFICULTIES UNDER THE NEW VACCINATION ACT"

To the Editors of THE LANCET

SIRS,—In face of the ever-increasing difficulties and the invidious criticism which confront the justice or magistrate whenever he has judged it right to refuse an exemption certificate in accordance with the discretionary power vested in him by the so-called "conscience clause," might it not be possible to provide every magistrate with a well-considered formulary of test questions whereby he could practically sift the worth or worthlessness of each applicant's *conscientious* objections? Would it not be expedient during the time the Act remains in force for the medical profession to frame such a schedule of test questions for the use of magistrates in examining the validity of exemption claims? Medical opinion is so solid as regards both the efficacy and safety of vaccination that it surely would be possible so to frame a formulary of non technical test questions to be asked of each applicant as to disprove the alleged ill-effects following vaccination and at the same time convince by demonstrable evidence the magistrate—and perchance even the applicant—that the objections raised could not be substantiated when subjected to expert investigation, that is to say, expert so far as the magistrate would then be enabled to review the probabilities and possibilities of given statements by the light of medical opinion Such a course would vastly relieve the magistrate of the onerous task imposed upon him and would serve greatly to remove the mistrust provoked in the public mind by the hirelings of the Anti Vaccination League

I am, Sirs, yours faithfully,

Windsor, March 25th, 1899. W LISLE GOODRIDGE

To the Editors of THE LANCET

SIRS,—The ventilation of this subject in your columns and at meetings of medical societies seems to have brought out the fact that we have in the New Vaccination Act increased powers to secure the efficient vaccination of most of the babies born this year and henceforward With the public vaccinator, bound to make four insertions and to obtain a minimum scar area, and the vaccination officer, unhampered by a board of guardians, behind us we should be able to persuade most parents (*pace* "P P") to let us do our duty to the public by vaccinating their children properly before they are four months old At the last meeting of the Plaistow Medical Society, after an account of the new Act had been given by the public vaccinator for the district, the following resolution was passed "That vaccination should be performed with calf lymph and that not less than three insertions should be made"

This is only a pious opinion and does not set a very high standard, but, considering that the "one-small place-for a shilling" game (to call it by no worse name) has so often and so recently been played here and that vaccination reform must spring from, and be fostered by, the medical profession, it is at least an apology, an appeal, and a challenge

I am, Sirs, yours faithfully,

HON SEC PLAISTOW MEDICAL SOCIETY

March 27th 1899

To the Editors of THE LANCET

SIRS,—In reply to Mr Blaker I never said "I considered it offensive, undignified, unprofessional, or irksome to arrange with my own patient for vaccinating his child." He leaves out the very important words "without being sent for or consulted," which is a very different matter On the contrary, should the parent call or send for me I should be very happy to arrange it I repeat it is no part of my duty to call unasked to vaccinate and would also be every one of the adjectives he quotes Some patients are never seen from one confinement to another, another medical man, perhaps, attending for sickness, some may take an aversion to their accoucheur and vow they will never have him again, some may avail themselves of the services of the public vaccinator for economy's sake, the babies of a fourth series might not be very well at the time of the visit but not thought sufficiently ill to call in a medical man, a fifth series may object to vaccination Supposing one did call, the visit, being paid, may necessitate several others, say, in postponement, as if you accept responsibility in the one you must do so in the other All these visits have to be charged for, that being so I repeat that one might be taxed with touting, especially by the parents of the first three or the medical men whose services are substituted Your correspondent "Fairplay" not succeeding in proving his assertion as to the private attendant's obligation to carry out the law, shifts his ground and questions if it is not always the duty of the medical attendant to safeguard his patient I sometimes hear from outsiders that the children of patients of mine are ill with measles scarlet fever, &c, and that the parents are doing without medical attendance I do not consider it my duty to call and warn them of the risk and "offer my services" to safeguard the case Our own patients are only our patients when they request our services and then only our responsibility begins, till that time they are free agents with their own responsibilities, being never at any time our property This very new duty as laid down by your two correspondents will not, I think, be accepted by family practitioners If we began to do so our reception in time might rival that of "P V" in your issue of Feb 18th and our "self importance" (self respect is a better word) suffer Both your correspondents have taken up a perfectly untenable position, but, seeing that public vaccinators are likely to find a Scylla, advocate a line of practice to private practitioners where they would probably find a Charybdis I may say that this new version of our duty seems to have extended itself to vaccination officers I received to my surprise the other day per post the certificate of a child whose vaccination I had postponed the time being up to the day I need hardly say I sent it back to him to see after himself

I am, Sirs, yours faithfully,

March 25th, 1899. GENERAL PRACTITIONER.

Belgaum, but the greater part of the evidence is merely an account of the measures taken to limit the progress of the plague or consists of descriptions of its course No evidence of any scientific value has been published during the week The *Times of India* remarks that "the reputation of the Plague Commission is still to be made, for the mere collection of such evidence as the Commission have so far got together can scarcely justify their travelling expenses"

March 1st

LIVERPOOL

(FROM OUR OWN CORRESPONDENT)

The Liverpool Chamber of Commerce and Tropical Diseases

IN view of the prominence now given to the subject of the study of tropical diseases it will be interesting to recall the efforts made by the Liverpool Chamber of Commerce in June, 1896, to obtain information as to the means of combating with blackwater fever The African Trade Section of the Chamber, of which Mr Alfred L Jones was the chairman, invited Dr Edward Adam (whose appointment by the Liverpool Chamber of Commerce as the delegate of the Chamber on the Liverpool School of Tropical Diseases was recorded in THE LANCET on March 18th) to address the section on the subject of the means for combating with blackwater fever Dr E Adam, in reply, said that with regard to the curative treatment of the disease he had no specific remedy to suggest, but in his opinion every case was best treated on its own merits He thought that more attention should be directed to preventive measures, and in this connexion suggested the possibility of the application of a method of inoculation as was done in vaccination and as was then being done for the prevention of cholera in India He called attention to the large outlay which would be involved in experiments which could only be carried on by means of Government aid Dr Adam also stated that blackwater fever was comparatively unknown on the West Coast of Africa until the last 15 or 20 years During a residence of six years in Old Calabar he had never seen a case and had never heard of it until recently No reference was made to it by Sir Ranald Martin in his book on tropical diseases, and it was difficult to account for the introduction and serious development of this malady on the West Coast of Africa Other interesting suggestions were made by Dr Adam in regard to preventive measures, such as the purification of the local water supply and due regard to the physical condition of those leaving Europe for service on the West Coast of Africa Bad teeth giving rise to indigestion, also to neuralgia, causing loss of rest and lowering of the resistive vigour of the body against disease, were a frequent source of trouble The address was favourably commented upon by the *Lagos Echo* of Sept 19th 1896 which remarked that if "some parts of the Coast have not without reason earned the gruesome appellation of the 'white man's grave' it is no less true that many Europeans in the forcible language of the doctor dig their own graves' as much while they are in Africa as when on furlough in England." Another donation to the School of Tropical Diseases is announced Messrs Swan and Hunter, the well known shipbuilders of Wallsend-on Tyne, have intimated to Mr Alfred L Jones, the chairman, their willingness to subscribe £100 a year towards the funds of the institution The income of the school, I believe, now amounts to close on £1200 a year The chairman and the committee of the School of Tropical Diseases have issued invitations for the inaugural dinner which will be held at the Adelphi Hotel on Saturday, April 22nd

Liverpool Ladies' Charity

The annual meeting of the Liverpool Ladies Charity and Lying in Hospital was held in the town hall on March 27th, under the presidency of the Lord Mayor The report expressed congratulation that, owing to the favourable condition of the working classes the number of women who applied for the benefits of the Charity showed a further reduction 1633 poor women were attended by the midwives in their own homes In 338 cases the patients were so poor as to make it necessary for the Charity to assist them in lending the needful bedding and clothing The mortality in the hospital had been unusually large during the year 1898, the deaths numbering nine The expenditure for the year had amounted to £2455 8*s* 8*d*, whilst the income from all sources had been only £2146 7*s* The committee were therefore compelled to realise investment stock to provide the deficiency The honorary secretary expressed regret that no medical student had availed himself of the midwifery work of the institution The committee are making arrangements for receiving into the hospital carefully selected cases of unmarried girls who are about to be confined and who have previously borne a good character

Liverpool Infirmary for Children

Dr Robert Craig Dun, the senior demonstrator and assistant lecturer on anatomy in University College, Liverpool, has been appointed honorary surgeon to the Infirmary for Children in the room of Mr R W Murray, who has been elected to a similar post at the Northern Hospital

March 28th

SCOTLAND

(FROM OUR OWN CORRESPONDENTS)

The New Commissioner in Lunacy

ON the recommendation of the Secretary for Scotland the Queen has been pleased to appoint Dr John Macpherson, medical superintendent of the Stirling District Asylum, Larbert, to be a Medical Commissioner in Lunacy for Scotland in place of Dr John Sibbald, retired

Edinburgh Royal Infirmary

At the meeting of the managers of the Edinburgh Royal Infirmary held on Monday, March 27th, intimation was given of a donation of £50 from the Earl of Stair, K T, towards the expenses of the "Nurses' Home of Rest." In connexion with this the Rev Dr Scott referred to this home as a new departure on the part of the managers and expressed the opinion that in it they would have the sympathy and attention of the public He hoped that his lordship's example would be largely followed

Mr J C Wordie, Oriental Club, London, has, through Dr Hunter Mackenzie, given a third donation of £100 to the Eye, Ear and Throat Infirmary, Edinburgh

March 28th.

IRELAND

(FROM OUR OWN CORRESPONDENTS)

Roman Catholic University Medical School, Dublin

THE governing body of the Roman Catholic University Medical School have recently received a letter from the Secretary of State for War authorising them to nominate a student of that school for a commission in the Royal Army Medical Corps The nomination must be made at an early date, as the candidate who is selected will be obliged to report himself at Netley on April 4th

Sir William Stokes

The honorary membership of the Imperial Academy of Medicine at St Petersburg has recently been conferred on Sir William Stokes of Dublin, Surgeon in Ordinary to the Queen in Ireland This is the first occasion on which this honour has been confered on a member of the surgical profession in this country

The Training of Nurses in County Infirmaries

The new rule made by the Local Government Board in reference to the training of nurses, the effect of which would be to exclude the training of all those residing in infirmaries or hospitals in Ireland outside Dublin, Belfast, and Cork, is causing a great deal of discussion At the monthly meeting of the Londonderry Infirmary Board on March 21st, the matter was under consideration when Sir W Miller, the well known surgeon of that institution claimed that in such a place a nurse gets a far better training than in a clinical hospital where there are students, as the probationers were taught everything—how to bandage and how to give assistance in surgical matters, such as setting fractures and dislocations It was decided to ask the Local Government Board to inspect the Londonderry Infirmary so as to satisfy themselves of the modern lines on which it was conducted, as well as the advantages it offered in the training of

to the position and privileges of Russians The pure-blooded seem to be devoid of that absurd prejudice which reigns in India and the West Indies on this question This difference of treatment must surely produce very important results at some future date On the other hand, it is argued that the difference of results accounts for the difference of treatment It is said that the cross between the East Indian and the European is less satisfactory than that of the European with the negro and that both are very far inferior to the product of a mixture of Turanian and European blood These differences are doubtless of vast importance One would naturally imagine that those possessing in any degree the blood of the ruling race would, other things being equal, have some political or social privileges over those of the subject race It is not so, however, in India and herein lies a grievance which time and progress do not seem in any way to have lessened

The weekly report on the progress of the plague is very unsatisfactory I give the Bombay Presidency plague mortality

Cases of Plague and Deaths therefrom reported to the Government during the week ending Feb 24th

Cities	Cases	Deaths.	*Districts (cont)*	Cases	Deaths
Bombay	942	891*	Kolaba	81	57
Karachi	16	8	Ratnagiri	8	4
Poona	37	30	Belgaum	227	160
Districts			Dharwar	301	244
Ahmedabad	1	1	Bijapur ..	64	62
Panch Mahals	101	68	*Political Agencies*		
Kaira	92	81	Baroda	153	118
Broach	79	68	Kathiawar	3	1
Surat	12	11	Kolhapur	269	199
Kanara	10	9	Cutch ..	13	6
Thana	176	127	Mahi Kantha	1	0
Khandesh	49	44	Rewa Kantha	2	8
Nasik	73	57	Palanpur	2	5
Poona	17	9	Savanur	1	1
Satara	180	158	Aundh ..	2	2
Sholapur	10	7	Bhor ..	5	3
Ahmednagar	8	7			

* Much false registration occurs and the plague mortality (judging from the excess of deaths over the average) is more probably 1500. The whole of the list is probably very much underestimated both in the number of cases and of deaths

The number of cases and deaths for the week ending Feb 17th were 2857 and 2258 respectively, making the totals of cases and deaths up to date 230,175 and 182,156 respectively Karachi, Hyderabad, Shikarpur, Upper Sind Frontier, Thar and Parkar districts and Dharampur, Sachin, Janjira and Akalkot States were free There have been no deaths from plague among Europeans for several weeks In addition there has been a marked increase in the Kolar Goldfields and a recrudescence in Calcutta There have been 24 cases and 17 deaths in Calcutta and there has been a disturbance almost amounting to a riot over the question of disinfecting some dangerous and suspected premises In Bombay city the total mortality has risen from 1907 to 2249 for the past week—a rate of 139 97 per 1000 per annum As the average weekly mortality is considerably under 600 this indicates a probable mortality from plague of over 1500, and yet the plague returns only show 945 deaths as reported from this disease Only 313 of the cases of plague discovered went to hospital As the plague returns are so faulty I give the general death rate in Bombay amongst the various races and castes calculated on the number of deaths for the past week —

Low caste Hindus at the rate of	225 per 1000 per annum
Caste Hindus	150
Mohamedans	138
Native Christians	112
Bhattias	105
Brahmins	97
Eurasians	96
Parsees	53
Europeans	5

The recrudescence is developing in Poona and there is a further increase recorded at Karachi Here the town is being rapidly evacuated—the residents camping out in the adjacent country Plague is increasing in Broach city but it is important to note that while only part of the city has been evacuated hardly a case occurs in the segregation camps This is very strong evidence for clearing all the people out of the houses of an infected town

The plague rules have been applied to Jeddah (the port for Mecca) and there is reason to believe that more cases are occurring in East Africa than become publicly known

A considerable number of cases of plague have been treated with the steam bath at one of the hospitals in Bombay and a report upon the results has been issued by Dr Twigg The method has been adopted on the theory of eliminating the poison of plague from the system, but while certain symptoms seem to have been relieved by it and it seems popular amongst some of the natives, the figures published endeavouring to show its power to lower the mortality and to prolong the average duration of life are vitiated by the selection of cases The same error was made with regard to the cases treated with Lustig's and Roux's sera and the statistics are absolutely valueless There does not appear to be any satisfactory ground for supposing that this method of treatment is of any material value

To show the extraordinary change of opinion which has taken place in plague administration amongst responsible authorities I refer to the concessions which have just been made in the new regulations for Calcutta Of course all outgoing vessels must have clean bills of health, but for the city itself the failure to discover cases has so impressed the authorities that anything like forcible measures either to detect cases or to insist on their removal to hospital have been abandoned Patients will be permitted to resort to ward, caste, or family hospitals if they like and persons will be permitted to set apart portions of their dwellings or gardens for use as private hospitals In future no person will be removed to a public hospital without his consent provided that suitable arrangements are made for the treatment of the case at home The other inmates are *to be induced* to remove elsewhere Medical attendance and medicines are to be provided free of cost These changes mean that nearly all cases will be treated in their own homes and that very few will go to the hospitals There is no prospect however, that by these means a larger number of the cases will be reported On the contrary there is every reason to believe that more cases will occur and that the authorities will hear nothing about them This is the experience of Bombay It amounts to letting the plague pursue its course without let or hindrance, but it is true that no measures except wholesale evacuation have any effect on the course of an outbreak of plague The value of disinfectants appears to be more than doubtful The new policy is either a concession to native opinion or an admission of impotence to check the course of the disease A rumour is current that the Government have stopped Professor Wright's inoculation against typhoid fever Considering how common typhoid fever is in India and the severer type (mortality 25 per cent) that it assumes compared with the disease at home and the large number of soldiers (over 1800) annually on the sick list from it this prohibition seems an example of official and meddlesome interference Inoculation has been of course purely voluntary but many soldiers at Bangalore and Rawalpindi have availed themselves of its protection It was purely an experiment among Europeans so that the feelings of the natives on the matter had not to be considered It is difficult to see what reason can be shown by the Government against the use of this prophylactic in the face of the annual loss of life (about 500) amongst so large a proportion of the youngest troops, and typhoid fever seems especially fatal amongst the young officers newly arrived in India If the rumour be correct this is not the first time that scientific work has been officially prohibited

The Plague Commission have taken measures to test for themselves the efficacy of Lustig's curative serum The figures hitherto published are unreliable in consequence of the cases not having been taken in regular order on admission to the hospital A certain number of cases will be put under special observation, and one half of them will be treated with Lustig's serum and the other half without it In consequence of the serum obtained from different horses varying in its apparent curative powers it is proposed to mix and average the serum obtained from the different horses at the Parel Laboratory It is impossible to use the curative serum with the same extravagance as has accompanied the use of the preventive preparations for the simple reason that it cannot be made in sufficient quantity, but I think that at this stage of the epidemic when abundant time has been given for its preparation a much larger quantity should be obtainable for public use

The Plague Commission have [illegible] sitting at Satara and

the next thing to it) were either wholly or partially closed by order of Baccelli himself owing to insubordination on the part of the students Nothing, indeed, can be more radically unsound than the Italian university system, and it is to the honour of our profession that from its ranks have mainly come the men who have most effectively diagnosed the evil and most convincingly formulated the treatment Weed out the "groves" of the Italian "Academe", let their really vigorous developments have more breathing space and room to expand by extirpating the stunted "academic undergrowth" (as the minor universities may be called), and let the young brains of Italy have the chance of moulding and forming themselves for professional work under the protecting, fostering shade of the true "forest-giants" of literature, science and philosophy—"hic labor, hoc opus est" The Bill by which Baccelli undertakes to rehabilitate his country's languishing university life may be broadly described as an application to academic institutions of the law of "natural selection" with its consequent "survival of the fittest" He grants to all universities the completest autonomy in teaching, in administration, and in discipline, he leaves them the freest possible hand in adapting themselves to professional interests, scientific and practical, and he subjects them only to such outside pressure as may keep them useful purveyors for the wants of the State For this purpose he institutes a "State examination" through the portals of which alone the aspiring advocate, medical man, or engineer can become eligible for the official posts the name of which in Italy is Legion, so that according to the success with which they turn out men capable of passing this examination will the university or universities prosper or decay The examiners appointed by the State may or may not be drawn from the 'seats of learning," but there will be no room for "favour" or what may be called "academic nepotism" Another provision which will practically extinguish the smaller universities or reduce them to the rank of preparatory schools will be the raising of the fees which are still absurdly low, remaining fixed at the mediæval standard of money values and which have thus made professional qualifications too easily accessible to classes more properly claimed by commerce, industry, or the useful arts Still, the poor man's son will have his chance should superior gifts indicate him for one or other of the liberal callings, he will have the "borsa di studi" (bursary), the scholarship, the "exhibition" not unknown in Italian academic life, reinforced, as Baccelli anticipates, by other bounties of the kind Reduced in numbers by such restrictive ordinances, the students in each university will be more manageable by the authorities whose hands will be strengthened by a "curator studiorum," a functionary appointed by the State to keep a benevolent eye on academic life and to form the medium through which the State can be appealed to in cases of "excess of jurisdiction" on the part of the profession or of turbulence or contumacy on the part of the students. The Bill when it becomes law (whatever may be its modifications in minor clauses) will in Baccelli's forecast, guarantee to the students a more thorough and decorous curriculum of study under teachers stimulated to a more honourable rivalry than that of merely underselling each other, the "rector magnificus" of each university will be appointed without intervention of those undergraduate elements which have hitherto bred nothing but tumult and disorder, and the State examination will keep the field open to the most proficient out of all the universities, respecting only the principle of "detur dignior" The free hand vouchsafed to each university will encourage that "flexibility of adaptation" by which courses of study or times and seasons may be modified so as to meet requirements special or general, local or national, all under the pressure, however, of that "State examination," superiority at which will constitute the university's claim to attract the student or future professional man to its halls Relieved of its plethora of idle undergraduates who simply covet a "diploma" for the social distinction which it may give or the public "career" which it may conduce to, the university will no longer deplete the industries the trades and the handicrafts of the country by withdrawing from them their proper *personnel* and inducing the anæmia under which they have long laboured Every Italian interest, it is hardly too much to say, will profit by the academic revolution to be wrought by Baccelli's Bill, the minor provisions of which cannot fail to emerge from committee more effective and salutary after the thorough sifting which they will have received. Among its critics the best have been Baccelli's own professional colleagues, one of whom, Dr Tommaso Senise, *privat docent* in Medical Pathology in the Neapolitan School and Member for the modest constituency of Mihtello, made quite a parliamentary "hit" by the able speech in which he pointed out defects in the measure which would have to be removed before its really beneficent provisions could attain their end

March 25th.

CONSTANTINOPLE

(FROM OUR OWN CORRESPONDENT)

The New Hospital for Children

THE inauguration of the Hamidieh Hospital for Children took place a fortnight ago The need of a special hospital for children has long been felt, as lack of proper care has often proved to be the main cause of the spread of infectious diseases amongst the children of this metropolis The hospital has grounds covering an area of about 40,000 square feet, on which are erected nine separate blocks All the different parts of the building are constructed according to modern requirements and are surrounded by beautiful gardens for recreation The blocks are a good distance apart from each other, so that children with infectious diseases can be isolated in separate wards One of the blocks is to be used for cases of diphtheria, another for small pox, a third for scarlet fever, and a fourth for measles A fifth block is fitted up for cases about the nature of which there is some uncertainty Three blocks are to be used by the members of the staff There is, moreover, a nice little laboratory

The Russian Hospital

The Russian Embassy has just been authorised by the Imperial Government to have a convalescent home on the beautiful island of Prinkipo where convalescent patients from the Russian Hospital will be sent. This is quite a novelty here, as none of the other large hospitals have such homes The Russian Hospital enjoys little popularity, but there is no doubt that a good many well to-do convalescents will take advantage of this new health resort It may not be out of place to remark that the British Hospital here is practically a seamen's hospital and is almost unknown to the general public, whereas the German Hospital enjoys a first-class reputation, particularly for its surgical department under Dr Kambouroglou The French Hospital comes next A properly equipped British hospital could do good work for the British colony and for numerous patients of different nationalities

Dr Delacour

Dr Delacour, physician to the French Embassy and delegate of France to the Superior Council of Health, is to return to Constantinople towards the middle of April Dr Delacour is widely known here and he will be welcomed back by his old friends, especially by the members of the French colony He had gone to Nice to recover his health

March 22nd.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT)

Sydney Hospital

THE annual report of the Sydney Hospital showed that 3904 patients had been admitted during the year, of whom 390 died The total number of attendances were in the casualty department, 26,192, medical, 25 775, surgical, 13,335, eye 7471, ear, nose, and throat, 6060, diseases of women 6119, skin diseases 3456, and dental department, 3893, being a total of 92,301, as against 83,396 for 1897 Reference was made to the honorary medical and surgical staffs, the resident medical staff, the compilation of a new hospital pharmacopœia, the opening of the new buildings for the pathological department, the appointment of Mr O H Helsham, B A., as secretary vice Mr H D Russell, the resignation of the matron, Miss Gould and other matters of management The cost per bed for the year was £61 9*s* 11*d* The income for the year was £17,920 9*s* 4*d*, towards which the Government contributed £2370 12*s* 5*d* subsidy on the £ for £ principle, £8056 12*s* for maintenance of patients

nurses Surely the training which a nurse received in a large county infirmary like that at Londonderry was quite ample to qualify her for nursing in a workhouse At the weekly meeting of the Limavady Board of Guardians held on March 27th a strong protest was made against the action of the Local Government Board in reference to the nursing question on the grounds that (1) there would be an inadequate supply of the class of nurses which it had been made imperative to appoint, and (2) because the decision would practically exclude Northern probationers from obtaining the necessary qualifications, owing to the expense and inconvenience which would be entailed in their having to be trained in hospitals so far from their homes instead of institutions such as the county infirmaries Evidently there is a strong opposition to the recent action of the Local Government Board

Ulster Eye, Ear, and Throat Hospital

The annual meeting of this hospital was held on March 27th, when it was reported that during the year 1898 1565 patients had been treated at the hospital of whom 201 were admitted as interns The total receipts of the hospital from all sources had been £607 5*s* 4*d* and the expenditure had been £706 18*s* 8*d*, leaving the debt of the hospital £100 more than in the last financial year The total debt of the hospital is £570 5*s* 5*d* The committee make special reference to the difficulty of securing funds for hospital purposes and as they have patients from several counties in Ulster they propose to endeavour to secure aid from the country Electric light had been introduced into the hospital It had been decided to change the name of the hospital to that of the "Benn Ulster Eye, Ear, and Throat Hospital," so as to perpetuate the name of the Benn family who have done so much for Ulster by the establishment and endowment of this and other hospitals in Belfast

The Belfast Ophthalmic Institution

The report presented at the annual meeting of the supporters of this hospital which was held on March 27th showed that during the year 1898 1889 cases were treated, of which 1149 were eye cases, 370 ear cases, 270 throat cases, and 100 intern cases The importance of a re arrangement and enlargement of the extern department and the absolute necessity for a new operating room more in keeping with the advance of modern surgery were dwelt on, and it was said that these changes could be accomplished for £300 A large number of students were receiving clinical instruction Financially the hospital was in a very sound condition, there being a balance of over £103 The report submitted was in all respects very satisfactory

March 23th

PARIS

(FROM OUR OWN CORRESPONDENT)

The Diagnosis of Tubercle Bacilli in Pleuritic Fluid

M Besançon and M Griffon have just made known a discovery which promises to be of the greatest use in the diagnosis of the tubercle bacillus in cases where direct microscopical examination is of no avail, as for instance in the effusions of pleurisy Until now the accepted method has been to inject some of the suspected fluids into the peritoneal cavity of a guinea pig, but this procedure often failed to give any definite result even when the fluid came from a patient undoubtedly the subject of tubercle Possibly the serum itself possessed immunising qualities, or else the microbes were in so very dilute a solution that there were too few in the small quantity of fluid injected to affect the animal The cultivation method would have given good results if the operator could have been certain of always using a cultivation medium of a constant nature Such a medium, however, was not known until M Besançon and M Griffon took to using agar agar (*gélose*) mixed with blood Pus from a chronic abscess connected with the ribs cultivated after this method gave at the end of 10 days bacilli visible under the microscope Pleuritic fluid from two patients, cultivated in the same way gave colonies visible to the naked eye at the end of 28 days Bacilli from these under the microscope are absolutely characteristic As a control experiment two guinea pigs were inoculated at the same time with the same fluid, and one of these animals which was killed at the end of 28 days showed no visible lesion due to experimental tuberculosis. In this case, then, the presence of the tubercle bacilli could not have been demonstrated without the culture method, and it is evident that this mode of research will be very useful By it observers will be able to diagnose the presence or absence of the tubercle bacilli in various effusions, such as those into the joints, the tunica vaginalis, the peritoneum, or the meninges

Army Medical Statistics for 1896

The seventh statistical report on this subject has just been published by direction of the Minister of War It is evident from the figures brought together therein by military surgeons that the sanitary condition of the army was much better in 1896 than it was in the two preceding years The efficients who served as a basis for the calculations in this report numbered 508,825 of all ranks, of which 17,961 were officers, 35,022 non-commissioned officers, 259 272 privates with more than one year of service, and 197,570 privates of less than one year of service The general sickness rate was only 573 per 1000 In 1895 it was 631, and in 1894 it was 592 The total number of deaths was 2959, being a death rate of 5 24 per 1000—by far the lowest yet observed in the army The chief diseases showing a diminution were influenza, typhoid fever, and acute pulmonary complaints 12,339 soldiers had resigned or had been invalided out for sickness, wounds, or other forms of weakness This is a reversion to normal conditions following the doing away with the recruiting of young soldiers classified as "bons avec infirmités" Out of 22,680 reserved men called up during 1896 for periods of training 25 died with the colours, and 2048 were invalided There is no return from the militia (*l'armée territoriale*)

The Lowering of Temperature in Weakly Children

At the meeting of the Academy of Medicine held on March 14th M Budin spoke upon the Lowering of Temperature in Weakly Children From certain observations which he had made he considered himself authorised in stating that a child begins to lose heat from the moment of birth This loss of heat may be very considerable in the case of a weakly child unless the greatest precautions are taken to avoid it M Budin had noticed that children brought to the Maternity Hospital for admission into the wards set apart for weakly children were often in a most deplorable condition In many of them the temperature was very low and they died in from 24 to 48 hours after admission Of 142 newly born children admitted to the hospital in the years 1895, 1896 and 1897 whose rectal temperature was but 33°C or even below it 139 died—a mortality of 98 per cent Of course this loss of heat is not the only cause of death in such cases for other factors have to be considered, such as syphilis, digestive disorders, and the like Loss of heat, however, is a most important factor for, according to M Budin, if precautions are taken to obviate this the mortality even in very weakly children falls from 98 per cent to 26 5 per cent In bringing this class of children from their homes to the hospital the greatest care must be taken, and for many years past the Assistance Publique has charged the nurses who fetch the children to travel by express trains and in well warmed second class carriages The same precautions should be taken by other than the official nurses Children placed in the revolving boxes (*tours*) of foundling hospitals or who are taken into cold churches or to the Mairie run great risks, and it is of the greatest possible importance for the well being of newly born or weakly children that all causes of chill should be avoided

March 27th

ROME

(FROM OUR OWN CORRESPONDENT)

Reform of the Italian Universities

ALL the professions, not least that of medicine, are profoundly interested in the great University Reform Bill which was carried through its second reading last week by its author, Baccelli, and which is about to undergo the inevitable modifications in "Committee of the whole House" During the debates which preceded its advance to that stage it was a significant fact that a large proportion of the 20 "seats of learning" open to Italy's 31,000,000 inhabitants (half of whom are "analfabeti" or

the next thing to 1) were either wholly or partially closed by order of Baccelli himself owing to insubordination on the part of the students Nothing, indeed, can be more radically unsound than the Italian university system, and it is to the honour of our profession that from its ranks have mainly come the men who have most effectively diagnosed the evil and most convincingly formulated the treatment Weed out the "groves" of the Italian "Academe", let their really vigorous developments have more breathing space and room to expand by extirpating the stunted "academic undergrowth" (as the minor universities may be called), and let the young brains of Italy have the chance of moulding and forming themselves for professional work under the protecting, fostering shade of the true "forest-giants" of literature, science and philosophy—"hic labor, hoc opus est" The Bill by which Baccelli undertakes to rehabilitate his country's languishing university life may be broadly described as an application to academic institutions of the law of "natural selection" with its consequent "survival of the fittest" He grants to all universities the completest autonomy in teaching in administration, and in discipline, he leaves them the freest possible hand in adapting themselves to professional interests scientific and practical, and he subjects them only to such outside pressure as may keep them useful purveyors for the wants of the State For this purpose he institutes a "State examination" through the portals of which alone the aspiring advocate, medical man, or engineer can become eligible for the official posts the name of which in Italy is Legion, so that according to the success with which they turn out men capable of passing this examination will the university or universities prosper or decay The examiners appointed by the State may or may not be drawn from the "seats of learning" but there will be no room for "favour" or what may be called "academic nepotism." Another provision which will practically extinguish the smaller universities or reduce them to the rank of preparatory schools will be the raising of the fees which are still absurdly low, remaining fixed at the mediæval standard of money values, and which have thus made professional qualifications too easily accessible to classes more properly claimed by commerce, industry, or the useful arts Still, the poor man's son will have his chance should superior gifts indicate him for one or other of the liberal callings, he will have the "borsa di studi" (bursary), the scholarship, the "exhibition" not unknown in Italian academic life, reinforced, as Baccelli anticipates, by other bounties of the kind Reduced in numbers by such restrictive ordinances, the students in each university will be more manageable by the authorities whose hands will be strengthened by a "curator studiorum," a functionary appointed by the State to keep a benevolent eye on academic life and to form the medium through which the State can be appealed to in cases of "excess of jurisdiction" on the part of the profession or of turbulence or contumacy on the part of the students. The Bill when it becomes law (whatever may be its modifications in minor clauses) will in Baccelli's forecast guarantee to the students a more thorough and decorous curriculum of study under teachers stimulated to a more honourable rivalry than that of merely underselling each other, the "rector magnificus" of each university will be appointed without intervention of those undergraduate elements which have hitherto bred nothing but tumult and disorder, and the State examination will keep the field open to the most proficient out of all the universities, respecting only the principle of "detur dignion." The free hand vouchsafed to each university will encourage that "flexibility of adaptation" by which courses of study or times and seasons may be modified so as to meet requirements special or general, local or national all under the pressure, however of that "State examination," superiority at which will constitute the university's claim to attract the student or future professional man to its halls Relieved of its plethora of idle undergraduates who simply come a "diploma" for the social distinction which it may give or the public "career" which it may conduce to the university will no longer deplete the industries the trades, and the handicrafts of the country by withdrawing from them their proper *personnel* and inducing the anæmia under which they have long laboured Every Italian interest, it is hardly too much to say will profit by the academic revolution to be wrought by Baccelli's Bill, the minor provisions of which cannot fail to emerge from committee more effective and salutary after the thorough sifting which they will have received. Among its critics the best have been Baccelli's own professional colleagues, one of whom, Dr Tommaso Senise, *privat-docent* in Medical Pathology in the Neapolitan School and Member for the modest constituency of Militello, made quite a parliamentary "hit" by the able speech in which he pointed out defects in the measure which would have to be removed before its really beneficent provisions could attain their end.

March 25th.

CONSTANTINOPLE.

(FROM OUR OWN CORRESPONDENT)

The New Hospital for Children

THE inauguration of the Hamidieh Hospital for Children took place a fortnight ago The need of a special hospital for children has long been felt, as lack of proper care has often proved to be the main cause of the spread of infectious diseases amongst the children of this metropolis The hospital has grounds covering an area of about 40,000 square feet, on which are erected nine separate blocks All the different parts of the building are constructed according to modern requirements and are surrounded by beautiful gardens for recreation The blocks are a good distance apart from each other, so that children with infectious diseases can be isolated in separate wards One of the blocks is to be used for cases of diphtheria, another for small pox, a third for scarlet fever, and a fourth for measles A fifth block is fitted up for cases about the nature of which there is some uncertainty Three blocks are to be used by the members of the staff There is, moreover, a nice little laboratory

The Russian Hospital

The Russian Embassy has just been authorised by the Imperial Government to have a convalescent home on the beautiful island of Prinkipo where convalescent patients from the Russian Hospital will be sent. This is quite a novelty here as none of the other large hospitals have such homes The Russian Hospital enjoys little popularity, but there is no doubt that a good many well to-do convalescents will take advantage of this new health resort It may not be out of place to remark that the British Hospital here is practically a seamen's hospital and is almost unknown to the general public, whereas the German Hospital enjoys a first-class reputation, particularly for its surgical department under Dr Kambouroglou The French Hospital comes next A properly equipped British hospital could do good work for the British colony and for numerous patients of different nationalities

Dr Delacour

Dr. Delacour, physician to the French Embassy and delegate of France to the Superior Council of Health, is to return to Constantinople towards the middle of April. Dr. Delacour is widely known here and he will be welcomed back by his old friends especially by the members of the French colony He had gone to Nice to recover his health

March 22nd.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT)

Sydney Hospital

THE annual report of the Sydney Hospital showed that 3904 patients had been admitted during the year, of whom 390 died The total number of attendances were in the casualty department, 26,192, medical, 25 775, surgical, 13,335, eye, 7471, ear, nose, and throat, 6080, diseases of women, 6119, skin diseases 3456, and dental department, 3893, being a total of 92,301, as against 83 395 for 1897 Reference was made to the honorary medical and surgical staffs, the resident medical staff, the compilation of a new hospital pharmacopœia, the opening of the new buildings for the pathological department, the appointment of Mr C H. Helsham, B A. as secretary vice Mr H D Russell the resignation of the matron Miss Gould, and other matters of management The cost per bed for the year was £61 9*s* 11*d*. The income for the year was £17 920 9*s* 4*d*, towards which the Government contributed £2370 12*s* 5*d* subsidy on the £ for £ principle, £8056 12*s* for maintenance of patients

admitted on Government orders, £700 towards the Regent-street Dispensary, and £350 for rent of Moorcliff and Victoria Lodge Towards the maintenance of the hospital the public contributed £2484 17*s* 9*d* The expenditure exceeded the income by £3309 9*s* The directors added "In spite of the earnest efforts made to keep the amount of subscriptions equal to that collected in former years it has not been found possible to do so owing to the continued succession of bad seasons and the general scarcity of money A considerable falling-off in revenue has to be announced for the past year, while the expenses do not show a corresponding reduction This is to be sincerely regretted, but an analysis of the balance sheet will show that the expenses have been kept within the most reasonable limits consistent with a satisfactory discharge of the calls made upon the hospital"

The Alfred Hospital, Melbourne

It is proposed to establish a children's department in connexion with the Alfred Hospital, Melbourne The Children's Hospital is greatly overcrowded The matter was left to a sub-committee to consider in conjunction with the medical staff

Launceston Hospital

A dispute has been waging for some time between the members of the branch of the British Medical Association in Launceston, Tasmania, and the hospital board as to the medical control of the hospital At present the patients are in charge of a resident staff, the honorary staff being merely consultants The members of the branch desire that the patients should be under the care of an honorary staff and they complain further that the board has treated the branch and the profession in a "most unsatisfactory and cavalier manner" The board, however has relaxed so far as to permit a member of the honorary staff to take charge of any special case or perform an operation at the hospital so long as the resident surgeon superintendent approves Dr Pike, Dr Pardey, Dr Holmes, and Dr Parker have been elected as the honorary consulting staff for the ensuing year

Colour blindness in Railway Employés

3201 employés on the Victorian railways have now been examined by the medical officers and it has been found that defects of sight and especially colour blindness are not so prevalent as was supposed when the sight-testing investigation was instituted, as 91 3 per cent passed the examination For the 278 who failed a practical examination was given and 115 passed

Diet of Australians

In various publications and lectures Mr Muskett of Sydney has called attention to the fact that Australians eat too much meat and not enough vegetables Mr Hodgson, of the same city, in a recent lecture maintained the opposite contention and asserted further that owing to the excess of starch and sugar in the ordinary Australian diet diabetes was becoming alarmingly prevalent He believed that eight out of 10 people suffered from this disease If this is true—and Mr Hodgson advanced no statistics in support of his belief—it is remarkable that the death rate from diabetes is not greater and has not increased, the figures being 1892, 25 deaths, 1893, 22, 1894, 14, 1895, 26, 1896, 20, 1897, 20 Mulhall's Dictionary of Statistics shows, moreover, that Australia is highest in the list as a meat-eating nation, the consumption being 276 lb of meat per inhabitant per year, as against 118 lb in Great Britain

Feb 8th

Obituary.

AMBROSE BLITHE VISE, M R C S ENG, L S A

As already announced in our columns, Mr Ambrose Vise, of Abbott's Manor House, Holbeach, passed away on March 4th at the age of 68 years He entered as a student at St Bartholomew's Hospital in 1851, and became qualified as M R C S Eng, L M, and L S A in 1854 For a year he was clinical assistant at the Brompton Consumption Hospital and on the termination of this appointment he removed to Holbeach where he continued to practise for upwards of 44 years, until in July last he was compelled to retire from active work owing to failing health He held the post of medical officer to the South District of the Holbeach Union for a period of over 42 years and was also public vaccinator for the same district He was likewise Admiralty surgeon to Holbeach, Fosdyke, and Fleethaven for about 30 years Mr Vise was the son of a medical man (Edward Blithe Vise), who was the son of a medical man (William Vise), who was the son of a medical man (Francis Vise) Mr Ambrose Vise's son, Mr Arthur Blithe Vise, is also a medical man so that in this family there have been medical men for five successive generations, an encouraging tribute to the vitality of our profession and a history which deserves to be recorded

Medical News.

VICTORIA UNIVERSITY—At the examinations held in March in the Faculty of Medicine the following candidates were successful —

FINAL EXAMINATION

Part I—A. G S Broughton, Yorkshire College, T L. Fennell R F Ferris A E. Finney and L. F Hill, Owens College A. E. Horsfall, and C E Horsfall Yorkshire College P H Hutton Owens College F W Johnson Yorkshire College L. R. Lempriere and B C Middleton Owens College W H Morrison and R V A. Mosley Yorkshire College R S Nichol W P Noall and H. W Russell, Owens College and G M Sharpe Yorkshire College

Part II—J W Aldred Owens College T T Bark University College *John Craig Owens College J T Grierson University College T W Hart and J E. Healey Owens College W S Henderson and J L W McFall, University College Thomas O Neill, Owens College J A. Reed Yorkshire College and Graham Renshaw *W H Richardson, and *O H Woodcock, Owens College

* Awarded second-class honours.

UNIVERSITY OF CAMBRIDGE—On March 16th the following degrees were conferred —

M B only—F P Cayley B A Trinity
M B and B C—W Eardley M A. and W L Wills M.A. St John's
M A (honoris causâ)—G Sims Woodhead Professor of Pathology

The examination in Sanitary Science for the diploma in Public Health will take place as follows —Part I, April 4th to 6th, Part II, April 11th to 13th

DEATH OF A CENTENARIAN — Miss Dinah Young of Bellevue crescent Clifton, who completed her 101st year in September last, died on March 18th

SUPERANNUATION GRANT—Mr Thomas Cotton, M D St And, L R C P Lond, M R C S Eng has been awarded a superannuation allowance of £120 after 34 years' service as medical officer of the Upper Holloway district

ACTION FOR LIBEL.—At the Glamorganshire Assizes held on March 21st before Mr Justice Darling a libel action was brought against Dr John Davies of Maesteg by Dr W H Thomas, J P, of the same place The cause of the action was the publication of a letter to the Bridgend Board of Guardians and also to a local newspaper in which defendant complained of the absence of professional etiquette on the part of the plaintiff The plaintiff claimed £1000 damages Eventually the defendant withdrew absolutely the statement which he had made about Dr Thomas In the result a juror was withdrawn

PRESENTATIONS TO MEDICAL MEN—The Mayor of South Molton, Devon, recently presented the medal lions and certificates to the successful members of the South Molton branch of the St John Ambulance Association Afterwards Alderman Bush, J P, presented Mr F W Kendle, M R C S Eng, with a silver mounted walking stick in appreciation of his services as honorary instructor of the class —The members of the Young Men's Christian Association at Dartmouth, who had formed a class in connexion with the St John Ambulance Association, on March 8th presented Mr Arthur Kyffin Crossfield, L R C P, L R C S Edin, with a riding whip in appreciation of his services as honorary instructor of the class —At the conclusion, a few days since, of his lectures on Ambulance First Aid in Morley (Leeds) Mr W Gorne, M B, Ch B Edin, was presented with a leather dressing case in token of his pupils' esteem —Mr Francis O Bryan, M D Durh, M R C S Eng upon leaving Littlehampton has been presented by his friends and patients

with a silver bowl and an illuminated address on vellum — At the Town hall, Bootle, on March 10th, Mr John McMurray, M D R U I, was the recipient of a testimonial He was elected mayor of the borough in November, 1897, and on the termination of his year of office in November last it was generally felt in the community that the ability and courtesy with which he and Mrs McMurray had discharged the civic functions of the year merited some public recognition from the residents, and a committee to promote this object was accordingly appointed Subscriptions were freely given, the result being the presentation of a horse and a brougham, with an address, handsomely bound, in which is inserted a photograph of the horse and the carriage, and the outside of the case is embellished with the arms of the borough The occasion was celebrated by an "At home" given by the present mayor and mayoress which was numerously attended —Mr H P Olivey, M R C S Eng, who has been a resident of North Curry for 40 years, was on March 17th, on the occasion of his leaving the district, presented with several gifts from the inhabitants—namely, an illuminated address signed by 160 subscribers, a silver inkstand, a pair of candlesticks, and a writing case, and from the North Curry Cricket Club a case of pipes —At a well attended public meeting held on March 21st at Dalkeith to celebrate the semi jubilee of Mr Robert Lucas M D, F R C P Edin, medical officer of the burgh and Surgeon Lieutenant-Colonel of the 3rd Battalion Royal Scots, Provost Liddell, who presided, presented Dr Lucas, on behalf of the subscribers, with a testimonial, consisting of a marble timepiece and ornaments, together with a bank draft for about £350 —On the same day Mr John Settle L R C P, L R C S Edin medical officer of the County Borough of Barrow in Furness was the recipient of a half size portrait of himself in oils from the members of the Hindpool Lodge of Freemasons, Barrow — On March 24th Mr George Barker the retiring chairman of the Consumption Hospital, Liverpool, testified his appreciation of the services of the staff and as a memento of his long association with the institution presented gifts to each member of it including the matron, nurses, servant, and porter —Mr Ernest George Symes Saunders, M D, C M Aberd, was presented on March 23rd with a silver mounted malacca cane by the Calstock (Cornwall) branch of the St John Ambulance Association in appreciation of his services as honorary instructor of the class

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS

Companies (Medical Profession) Bill.

THE Lord Chancellor has introduced into the House of Lords a Bill with this title, the object of which is to prohibit the profession or business of physician, surgeon, dentist, or midwife being carried on by a company

The Vaccination Question.

When the motion is made, probably on the Monday after Easter week, in the House of Commons for going into Committee of Supply on the Civil Service Estimates Mr Pickersgill will call attention to the Vaccination Order of Oct. 18th and the covering letter of the President of the Local Government Board to the boards of guardians, and if the rules of the House permit he will move a resolution on the subject.

Pharmacy Bill.

A Bill has been introduced into the House of Lords by the Government to amend the Pharmacy Act of 1868.

Isolation Hospitals

THE Earl of LICHFIELD has introduced in the House of Lords a Bill to amend the Isolation Hospitals Act of 1893.

HOUSE OF COMMONS

THURSDAY MARCH 23RD

The Peculiar People

Major RAMSAY asked the Home Secretary whether his attention had been called to the case of Senior a member of the Peculiar People, who received a sentence of four months imprisonment for neglecting to provide medical treatment for his child, and whether he would consider the advisability of remitting the remaining portion of Senior's sentence.—Mr JESSE COLLINGS, who replied to the question, stated that the offence of which Senior was found guilty was manslaughter The case had received careful attention but no sufficient ground had been shown for a remission of any part of the sentence.

Sewage Treatment at Epping

Mr T W RUSSELL, replying to a question on this subject addressed to him by Sir F DIXON HARTLAND, said: The Local Government Board have received complaints on the subject of the sewage at Epping The urban district council applied in November 1897 for sanction to a loan for works of sewerage and sewage disposal and also for a provisional order for the compulsory purchase of land for the scheme. This order was confirmed last session, but the district council state that they have experienced difficulty in acquiring the land and they are considering a different scheme from that originally contemplated. The Board are communicating with the district council, urging them to proceed at once in the matter

FRIDAY MARCH 24TH.

Death of a Recruit on Parade

General RUSSELL asked the Under Secretary of State for War whether his attention had been called to the sudden death of a specially enlisted recruit on Friday last on parade at Windsor whether this recruit was passed by a civilian doctor or a duly qualified member of the Army Medical Staff and whether he would cause a special inquiry to be made into this case so as to avoid if possible such weak and diseased men being again admitted into Her Majesty's service.—Mr WYNDHAM: Yes, sir my attention has been called to the death of Private Higson of the Scots Guards. He was passed by a duly qualified officer of the Royal Army Medical Corps. A full inquiry into his case is now in progress

MONDAY MARCH 27TH.

Court Fees of Medical Witnesses

Dr FARQUHARSON asked the Home Secretary whether his attention had been directed to the inadequate scale of fees for medical witnesses in courts of law and whether he would consider its revision with the view of more adequately remunerating medical men who were compelled to give evidence for their loss of time and expense incurred.—Mr JESSE COLLINGS, replying on behalf of the Secretary of State said This matter has received most careful consideration but the Secretary of State does not see his way to take any steps in the direction suggested.

The Case of Mr Lamont.

Sir CHARLES CAMERON asked the Lord Advocate (1) whether his attention had been called to the unanimous acquittal by a jury of Mr Lamont, formerly public vaccinator in the Island of Uist, tried at Inverness on March 15th for issuing false certificates of vaccination, when it was proved that his district was over 35 miles long and from five to 10 miles broad and intersected by numerous branches of the sea and that many of the houses were five miles off any public road and could only be reached by fording (2) whether he was aware that Mr Lamont's alleged crime consisted in not having returned to inspect at the end of the week the infants vaccinated before issuing a certificate of successful vaccination, and that the fee for the double journey and operation was 2s 6d. (3) was he aware that this charge was kept hanging over Mr Lamont's head for six months thereby preventing him from accepting a Government appointment in India and that he was finally arrested on a warrant issued by Dr Mackenzie, an honorary sheriff, who was one of the witnesses against him in the case kept in a police cell in Glasgow from Saturday till Monday conveyed to Uist in charge of a policeman, and obliged to find bail for £100 before being liberated and (4) if he would state at whose instance these proceedings were taken and whether they were taken under the provisions of a statute or of rules issued by the Local Government Board, and if under the latter whether until within the last few days no means had been taken either by the local authorities or the Local Government Board to acquaint them with the existence of such rules — The Lord Advocate replied: The answer to the first paragraph of the question is in the affirmative. The answer to the second paragraph is that Mr Lamont was charged with fabricating and uttering false certificates. In answer to the third paragraph I have no knowledge of a Government appointment having been offered to Mr Lamont but that in any case such a circumstance could not have affected the procedure. My information is that Mr Lamont was warned not to leave the Long Island as proceedings were pending which might necessitate his attendance for declaration and committal. He did leave the Long Island and left no means of acquiring his address the result being that a warrant of apprehension was applied for by the Procurator Fiscal and obtained from the resident honorary sheriff substitute in common form. The warrant was put into the hands of the police in Glasgow and was executed by them. I regret that Mr Lamont should have been subjected to the indignity and inconvenience of an apprehension, but I think the action of the Procurator Fiscal was justifiable under the circumstances which I have above stated. The answer to the fourth paragraph is that the proceedings were not under any statute or in respect of rules of the Local Government Board but were at common law upon an information laid by the parish council and precognitions taken by the Procurator Fiscal in ordinary course.

Phorphorus and Lead Poisoning

Mr JESSE COLLINGS said in reply to a question that he hoped after the Easter Recess the Home Secretary would be able to make a statement as to the action which the Home Office would take on the reports recently laid before Parliament with regard to phosphorus and lead poisoning He might refer Members to the memorandum by the Chief Inspector of Factories prefixed to the phosphorus report and the circular on the lead poisoning report issued by the Home Office as indicating the general lines of probable action.

Notification of Infectious Diseases

The Bill introduced by Sir Francis Powell to extend the Infectious Diseases Notification Act, 1889 to districts in which it has not been adopted was read a second time without debate at this sitting of the House

Sale of Food and Drugs Bill

On the motion of the Government this measure was referred for consideration to the Standing Committee on Trade Several Members, including Sir Walter Foster protested against the reference.

TUESDAY MARCH 28TH

Vaccination at St Pancras Workhouse

Mr CHANNING asked the President of the Local Government Board (1) whether he was aware that the entries in the medical officer's book at the St Pancras Workhouse show that between Jan. 1st and Feb 22nd, 1899 there were vaccinated in the workhouse three children eight days old, one child 11 days old one child 12 days old three children 13 days old, one child

16 days old, one child 18 days old, and one child 23 days old and (2) whether, considering that this vaccination of infants of from one to three weeks of age was contrary to the intention of the Second Schedule to the Vaccination Order of Oct 18th, which prescribes that the offer to vaccinate shall be made when the child is two months old, and that the Royal Commission condemned the practice of premature vaccination, he would direct the St Pancras medical officer to discontinue this practice—Mr CHAPLIN replied I find that the facts are as stated in the first paragraph of the question The medical officer states, however that in every case the parent specially requested the vaccination of the child and that no compulsion persuasion advice, or offer was resorted to He adds that all the cases referred to have been satisfactorily protected from small pox and have suffered no complications whatever There is nothing inconsistent either with the Vaccination Act, 1898, or the Vaccination Order in a child being vaccinated at an early age if the parent desires it nor as far as I know is there any power to prevent it.—Mr CHANNING: Does the medical officer receive fees?—Mr CHAPLIN: No, not the medical officer the public vaccinator

Queen Charlotte's Hospital

Mr CHANNING asked the President of the Local Government Board whether his attention had been called to the vaccination in Queen Charlotte's Hospital of the infant child, Humphrey of Mrs George Forbigger of 21 Belgrave-road, Cambridge when only two days old although the child was suffering from eczema when he and his mother were discharged on Feb. 11th, and to the fact that the disease had since become so serious that the child had been in hospital whether he was aware that the subscribers letters securing admission to Queen Charlotte's Hospital still contain a stipulation that the child must be vaccinated before the mother leaves the hospital, that was within 14 days whether the hospital authorities now hand or show to patients any notice that parents cannot, under the Act passed last year be compelled to have their children vaccinated under six months And whether he would take immediate steps to secure in Queen Charlotte's Hospital and similar institutions, a strict observance of the provisions of the Act.—Mr CHAPLIN replied I have caused inquiry to be made as to this case and find that a child named Humphrey Terheggen was vaccinated at Queen Charlotte's Hospital as stated, the child being in perfect health at the time. On the eighth day after vaccination a single small pustule had appeared on the child's hand and 28 days after vaccination the child was admitted into Addenbrooke's Hospital, Cambridge, suffering from a very common form of infantile eczema from which it has now almost recovered. The course of the vaccination throughout was quite normal, and during the child's stay in Queen Charlotte's Hospital it steadily gained weight. There is no statement on the subscribers letters as to vaccination but it is definitely pointed out on the order of admission that vaccination will not be performed if objection is made by the parent. I have no information as to any notices prepared by the hospital authorities as to the terms of the Vaccination Act, 1898, neither is there any obligation on their part to issue any notices as to the Act; but I am in communication with the guardians of the parish of St Marylebone and with the vaccinator at Queen Charlotte's Hospital and I am calling their attention to the provisions of the Act in reference to the vaccination of children in that institution and to the age at which vaccination is required by the Act.—Mr CHANNING: In his representations to the authorities of the hospital will the right honourable gentleman seek to discourage this early vaccination upon which he himself expressed a very strong opinion last session?—Mr CHAPLIN: That will be distinctly the effect of the communications I make

Alleged Cases of Lead Poisoning

Sir CHARLES DILKE asked the Home Secretary: (1) if he was aware that the deaths had occurred in the Potteries on Jan. 19th of Bertha Carter engaged in ware cleaning and taking ware from the dipper on March 13th of William Hopkins a glost-placer, on March 16th of Arthur Rushton, glost-placer (2) whether though all these were persons employed in the most dangerous processes, two of whom had previously suffered from lead poisoning no inquests were held; and (3) whether he would cause inquiry to be made into the more recent case of Henry Drakeford, dipper, who died on March 18th in a workhouse, where he had been for seven weeks, having been a dipper from the age of 14 and who after 15 years at dipper's work became subject to fits, from which he had suffered for several years and which were alleged to have been caused by lead poisoning—Mr JESSE COLLINGS replied to the question saying: There has been much difficulty in tracing the cases mentioned in the first paragraph of the question, but I now find that in all three cases death was certified as due to other causes than lead poisoning and in each case the medical man in attendance on the deceased is strongly of opinion that death was not in any way caused by lead. In these circumstances the cases did not and could not come to the notice of the coroner as cases where an inquest might be necessary Inquiry shall be made into the case mentioned in the last paragraph of the question.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number*

BEALE, PEYTON T B., F R C S Eng, has been appointed Surgeon to In-patients of the Great Northern Central Hospital Holloway road, London.

BIDDY HENRY MARTIN M.R.C S L.S A. has been appointed Medical Officer for Tedburn St. Mary by the St. Thomas (Exeter) Board of Guardians.

BULLMORE, W R., M D St. And., M R C S, has been re-appointed Medical Officer of Health to the Falmouth and Truro Port Sanitary Authority

BURGESS, A. H., M.B Ch.B Vict M.Sc., M R C S has been appointed Senior Assistant Resident Medical Officer to the Crumpsall Workhouse of the Township of Manchester

CARCILL, L. VERNON, F R C S Eng., has been appointed Assistant Ophthalmic Surgeon to King's College Hospital, London.

COLLINS W J, M B M S B S Lond., F R C S Eng., has been appointed one of the Honorary Secretaries of the Prince of Wales's League of Mercy

GOODING MATHEW RICHARD L.R C P Lond., M R C S has been re-appointed Medical Officer to the Barnstaple Port Sanitary Authority

JEPHCOTT C M.A. M.B B C Camb M.R.C S., L R.C.P Lond., has been appointed a House Physician to Guy's Hospital, London.

KAY, J G M B C M Edin. has been re-appointed Medical Officer to the Trellech Sanitary District of the Monmouth Union

KELYNACK, T N., M D Vict M R C P Lond. has been re-appointed Pathological Registrar to the Manchester Royal Infirmary

LEWIS J KING M.R.C S, L.S A., has been re-appointed Medical Officer for the Rewe District by the St. Thomas (Exeter) Board of Guardians

MACPHERSON JOHN M.D Edin, F R C P Edin., has been appointed a Medical Commissioner in Lunacy for Scotland, vice John Sibbald, retired.

MALINS, HERBERT, B A. Oxon M B., C M Edin. has been appointed Second Assistant Medical Officer to the St. Marylebone Infirmary North Kensington

MATHIAS R M.B Camb L.R C P Lond. M.R.C S has been appointed Medical Officer for the Pentyrch Sanitary District by the Cardiff Board of Guardians.

MOORHEAD R L., M.B. C M Edin., has been appointed Medical Officer to the First Sanitary Distict and the Workhouse of the Bridge Union.

PEYVOLD FRANCIS MORTIMER, M B, C M. Edin. has been appointed Medical Officer to the Newton Poppleford District by the St. Thomas (Exeter) Board of Guardians.

RIGBY HUGH MALLINSON M.B. B.S Lond., M.R.C S Eng L.R.C P Lond., has been appointed Surgical Registrar to the London Hospital, Whitechapel road E.

ROBINSON B, L.R.C P Lond., M.R.C S, has been appointed Medical Officer to the Rocester Sanitary District of the Uttoxeter Union.

SLOGGETT, HARRY PAYNTER, L.R.C.P Irel. M R.C.S has been appointed a Surgeon on the unattached list of the Victorian Naval Brigade Department of Defence, Victorian (Australia) Naval Forces.

SMITH THOMAS, L.R.C P Lond., M.R.C S., has been re-appointed Medical Officer to the Brampford Speke District by the St. Thomas (Exeter) Board of Guardians.

TOTHILL, F C M.B C.M Edin., has been appointed Medical Officer of Health to the Staines Urban District, vice A. Curtis, resigned.

UBSDELL, HENRY, M.R.C S Eng. L.S A. has been re-appointed Medical Officer to Buckfastleigh Devon.

WHICHER, ALEXANDER HASTINGS, M.R.C S L.S.A., has been re-appointed Medical Officer of Health to Midsomer Norton, Somerset.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL, Edmund street, Birmingham.—House Surgeon for six months. Salary at the rate of £42 per annum with board, lodging and washing.

BOROUGH HOSPITAL, Birkenhead.—Junior House Surgeon. Salary £75 per annum, with board and lodging, but no wine, spirits or beer

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's inn road, W C—House Surgeon. Residence, board, &c., in the hospital.

CHARING-CROSS HOSPITAL, London.—Bacteriologist to the Hospital and Lecturer on Bacteriology at the Medical School.

CHELSEA HOSPITAL FOR WOMEN Fulham road, S W—Clinical Assistant

COUNTY ASYLUM Chester—Junior Assistant Medical Officer, unmarried. Salary £120 per annum, rising yearly by £10 to £150 with board (no liquors), lodging and washing Also Medical Officer to act principally as Pathologist. Salary £150 per annum, with board (no liquors) lodging and washing

COUNTY ASYLUM, Shrewsbury—Junior Assistant Medical Officer for four years Salary to commence at £120 per annum, rising £10 a year to £140 (and £8 in lieu of beer &c.) with board, lodging, and washing Applications to the Medical Superintendent at the Asylum.

EAST SUFFOLK AND IPSWICH HOSPITAL, Thoroughfare Ipswich.—Second House Surgeon for one year Salary £60 per annum with board, lodging, and washing

GREAT NORTHERN CENTRAL HOSPITAL, Holloway road, London.—Assistant Anæsthetist for six months Salary at the rate of £10 10s. Also Surgeon to the Out-patients.

HARRIS PARISH COUNCIL.—Medical Officer and Public Vaccinator for the Southern Division of Harris. Salary £90 Other emoluments. Applications to Mr T Wilson, Solicitor Lochmaddy Clerk.

HOSPITAL FOR WOMEN, Soho-square London, W—Assistant Physician.

KILBURN MAIDA VALE, AND ST JOHN'S WOOD GENERAL DISPENSARY London.—Vacancy on the Board of the Honorary Medical Staff. Applications to the Secretary 13, Kilburn-park road.

LONDON COUNTY ASYLUM, Claybury Woodford Bridge, Essex.—Junior Assistant Medical Officer (male) Salary £150 per annum, with board, furnished apartments, and washing. Applications to the Clerk of the Asylums Committee 6, Waterloo-place, S.W

NORTHAMPTON GENERAL INFIRMARY —Assistant to the House Surgeon for six months. Board, lodging and washing provided and an honorarium of £25 given.

NORTH RIDING ASYLUM, Clifton, York.—Junior Assistant Medical Officer Salary £100, rising to £150, with board, lodging, washing, and attendance

NORTH WEST LONDON HOSPITAL, Kentish Town road.—Honorary Anæsthetist for twelve months.

PADDINGTON-GREEN CHILDREN'S HOSPITAL, London.—House Surgeon for six months. Salary at the rate of £50 a year with board and residence.

QUEEN CHARLOTTE'S LYING HOSPITAL, Marylebone-road, London.—Resident Medical Officer for four months Salary at the rate of £60 per annum, with board and residence.

ROYAL FREE HOSPITAL, Gray's Inn road, London.—House Surgeon for six months. Board, &c., provided.

ROYAL INFIRMARY Sheffield.—Junior Assistant House Surgeon. Salary £50 per annum, with board, lodging and washing.

SCARBOROUGH HOSPITAL AND DISPENSARY —Senior and Junior Resident House Surgeons The Senior for 12 months at a salary of £80 per annum, with board and lodging and the Junior for six months at a salary at the rate of £50 per annum, with board and lodging.

STAFFORDSHIRE GENERAL INFIRMARY Stafford. — Assistant House Surgeon. Salary £30 per annum, with board, lodging and washing

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY —Junior Resident Medical Officer Salary for the first three months at the rate of £50 per annum and afterwards at the rate of £75 per annum, with board and residence in each case. Applications to the Senior Resident Medical Officer 189, High street, Stoke Newington N

STOCKPORT INFIRMARY —Assistant House and Visiting Surgeon. Salary £70 per annum, with board, washing, and residence. Also Junior Assistant House Surgeon. Salary £2 per mensem, with board, washing and residence.

STOKE UPON TRENT UNION —Resident Medical Officer for the Workhouse. Salary, first year £100 £110 for the second year and £120 for the third year with board washing, and furnished apartments at the Hospital, subject to statutory deductions. Applications to the Clerk to the Guardians Union Office Stoke-upon-Trent.

VICTORIA HOSPITAL, Folkestone.—House Surgeon. Salary £80 per annum, rising to £100 with board residence, and washing.

WEST LONDON HOSPITAL, Hammersmith-road.—Assistant Physician.

Births, Marriages, and Deaths.

BIRTHS

AUSTIN ROBINSON.—On Feb 16th, at Durban, Natal Dr Lilian the wife of Dr Austin-Robinson, of a son (stillborn).

BEECHAM.—On March 22nd, at Hanger lane, Ealing the wife of William Beecham, L.R.C.P., &c. of a son.

BIGGER.—On March 23rd, at Aberfoyle Streatham-common, the wife of Wm. Grimshaw Bigger M.B Irel, M.R.C.S. of a son.

GRAY —On March 25th, at Prescot road St Helens Lancs. the wife of Andrew Gray M.D of a daughter

LAMBE.—On March 24th, at West-view Seaford, the wife of Thomas Lambe, M.R.C.S., L.R.C P., of a son

LAW —On March 24th at The Maples, Sideup, the wife of Robert Redman Law M.D Cantab., of a daughter

MCSWINY —On March 18th, at Weymouth, the wife of Flee -Surgeon McSwiny R.N., Dorchester road of a daughter

WALKER.—On March 27th, at Dawson place Pembridge-square the wife of Basil Woodd Walker M.D., of a daughter

MARRIAGE.

COOK—MADDOX.—On March 25th, at Christ Church, Hampstead, John Howard Cook M.S F.R.C S., younger son of the late William Henry Cook, M.D of Hampstead, to Ethel, younger daughter of Mr George Maddox, of Gainsborough-gardens Hampstead.

DEATHS

COOKE.—On March 22nd at his residence Glen Lea West End, near Southampton, George Edwards Cooke, M.R C S., L.S.A. aged 61 years

LEWIN —On March 20th, Heinrich Port, M.D., F R C P., of Finsbury square E.C.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Mar 29th, 1899.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo	Maximum Temp. Shade	Min. Temp	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
Mar 23	29·77	N W	...	54	35	28	Fzn.	30	Overcast
" 24	29·83	N	..	79	42	23	Fzn.	32	Fine
" 25	30·22	S.W	..	86	50	30	Fzn.	35	Overcast
" 26	30·24	W	0·21	74	56	35	46	49	Cloudy
" 27	29·96	S W		77	59	41	43	46	Cloudy
" 28	30·02	S W	0·02	85	59	41	48	51	Cloudy
" 29	29·87	W	0·02	97	61	50	50	54	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS

MONDAY (3rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M. Ophthalmic 1 15 P.M.) St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.) London Throat (2 P.M.).

TUESDAY (4th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.) Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.) London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (5th).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St Peter's (2 P.M.) Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) Cancer (2 P.M.).

THURSDAY (6th)—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) St. Mark's (2 P.M.).

FRIDAY (7th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.) St Mary's (2 P.M. Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (8th)—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 P.M.) Charing-cross (3 P.M.) St. George's (1 P.M.), St. Mary's (10 P.M.) London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.) and the Central London Ophthalmic Hospitals operations are performed daily

SOCIETIES

TUESDAY (4th).—PATHOLOGICAL SOCIETY OF LONDON (20 Hanover-square, W)—Mr R. Johnson Congenital Cyst at the Back of the Tongue —Dr Still and Dr Poynton: Rheumatic Nodules.—Mr D Arcy Power: Cystic Disease of the Breast in a Boy aged two and half years.—Mr T W P Lawrence and Mr J Lawrence: Hypertrophy of the Pituitary Body —Dr Rolleston Tumour of Antrum.—Dr Still: Biliary Calculi in Children.—Dr Russell and Dr Buzzard Paramœcial Cysts in the Liver —Mr T W P Lawrence: Atrophy of the Pancreas in Diabetes.

WEDNESDAY (5th).—OBSTETRICAL SOCIETY OF LONDON —8 P.M. Specimens will be shown by Dr A. Routh Dr Lea Dr McKerron, and others. Papers:—Dr W S. A. Griffith and Dr T. W Eden Notes of a Case of Puerperal Eclampsia with a Description of a Five Weeks Ovum removed in a Subsequent Pregnancy —Dr Lewers: A Case of Persistent Mento-posterior Position of the Face in which the Child was delivered alive by the Axis-traction Forceps.

THURSDAY (6th).—HARVEIAN SOCIETY OF LONDON (Stafford Rooms Titchborne-street, Edgware-road) —8.30 P.M. Clinical Evening

FRIDAY (7th).—WEST KENT MEDICO-CHIRURGICAL SOCIETY (Royal Kent Dispensary Greenwich-road, S.E.) —8.45 P.M. Discussion on Tuberculosis, with special reference to Treatment (opened by Dr G Heron). Short Papers:—Dr M. Dockrell (President) Tuberculosis of the Skin.—Mr E. Clarke: Tuberculosis of the Eye.—Mr M Collier: Tuberculosis of the Nose and Throat.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith, W.).—8.30 P.M. Dr S T Priest: The Open air Treatment of Tuberculosis.—Mr H. J Paterson: The Use of Gas in General Surgery

LARYNGOLOGICAL SOCIETY OF LONDON (20 Hanover-square W.)—5 P.M. Cases and specimens will be shown by Dr St Clair Thomson, Dr Poyser Dr Donelan, Dr Lack, Dr Kelson, Mr Parker Mr De Santi, Mr Cheatle, and others.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

THURSDAY (6th).—LONDON TEMPERANCE HOSPITAL.—2 P.M Dr S Fenwick: Clinical and Pathological Demonstration to Senior Students.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

SLEEPING SICKNESS

WE have received the following very interesting letter through Dr Prosser James The writer though not a medical man is evidently an intelligent observer and we should say that his theory as to the conveyance of the disease by the agency of the saliva is quite plausible —

SIR,—I am much interested to see that there are two Congo natives suffering from sleeping sickness at the Charing-cross Hospital I do earnestly hope that some further light on this terrible scourge will be found Some of the best of our native Christians have recently fallen victims to it Dr Manson has suggested that it is in some way due to the presence in the blood of the filaria sanguinis hominis of the diurnal species and as it is a theory of great possibilities he adheres very strongly to it I am afraid that the theory he has advanced will tend to absorb attention and let other possibilities pass unnoticed Personally I feel that it is in some other direction that the source of this mischief must be sought. It has been suggested that the eating of raw manioc (cassava) rich in hydrocyanic acid is the cause but that does not in any way account for the phenomena. The disease has newly (comparatively) invaded our district. Its advent was slow and extended over years but the number of cases is steadily increasing We heard of it lower down in the Cataract Region but scarcely ever if ever of a case in our own district Now it is terribly common I should think that from 4 to 5 per cent of the population have died from it last year and again this year I suppose that of the inscribed members of our native church seven have died this year or are hopelessly affected out of 130 members. I would note then (1) It comes as a slowly spreading epidemic (2) the eating to some extent of raw manioc is nothing new (3) the presence of the filaria in the blood is no novelty (4) neither is the presence of the mosquito (5) it must be contagious in some obscure way and (6) it may lie dormant in the system for many years and then develop

As to its *contagious* character (1) we had a young man on our station whose sister died from it and later his mother who nursed her became ill and died from it The young man feared for his brother and brought him to live on the station with us when his mother began to ail. The young brother showed symptoms within six months and died in about six months more Then the young man fell sick and died from it He had visited his home when his sister and mother were ill I believe that a married brother in the town a smart fellow leader in public opinion and trading expeditions, died also from it about that time Many in their town lived in much more of squalor than did they while the young man in question was well housed and had been for years a cook well clothed and fed (2) The senior chief of the Kinsuta district sickened and died from it, then one and then another of the elder chiefs of his own township and district who often met him and joined with him in potations of palm wine sickened and died from the same disease Indeed, instances could be multiplied of cases like this all clearly pointing to contagion The Christian church at Mbanza Manteke—whence these lads come, I believe—was not decimated but worse some 50 to 60 per cent of the members died from the disease when first it invaded those parts Nearer to my own home I have passed through large townships and districts almost depopulated by it. It is now working cruel havoc near my own home.

Now as to the means of contagion The belief of my colleagues at Wathen and myself is that it is conveyed by the saliva. The people drink from the same cup and eat from the same plate and there are abundant opportunities for the conveyance of the saliva by these means This would account for the extinction of families as instanced above, also for the old chiefs who almost daily shared the palm wine loving cup at the palavers. Indeed, that seems to have been the only means of contagion for they do not shake hands there We believe even that the communion cup conveyed the contagion in the Mbanza Manteke church and in consequence separate any of our people suspected They are not allowed to partake of the same cup as the rest. We note that those who have nursed cases on our own station under careful instruction by us, such as our dispensary assistant., have not taken the disease having been careful to wash their hands after contact and never to drink from the patient's cup. We see much that points to contagion by the saliva. I do not know where the bacillus of hydrophobia is to be best found, whether in the saliva or blood of the affected animal, but should be glad if the saliva and saliva glands of the sleep patients could be studied

As to the onset of the disease, it is generally noted by an unusual drowsiness but in the cases of our more intelligent and Christian natives the first symptom which has attracted our attention has been some most unaccountable outbreak of passion, some unreasonable display of temper or where a usually well behaved man becomes outrageously impudent and unbearable The suspected patient is morally unbalanced, he will lie persistently that he never sleeps other than at night and so on. Fever comes day by day and the sleepiness becomes periodic. The native doctors are said to cure some cases by most drastic purging and by rubbing pepper into the eyes. The former may be of service. One patient I treated in the early days of our mission seemed to recover after a strong course of purging and iron tonic and returned to the town and home duties but was killed in the burning of her town six weeks later So the permanency of her cure was never proved. Another case that of Mlemvo who helped me in my literary work—he was suspected of being in the early stages of the disease seven years ago I treated him with arsenic and it passed away for a while returning after six or eight months, again the same treatment was resorted to and since then it has not recurred. *Post hoc* or *propter hoc?* Perhaps, indeed he was only in a low feverish condition I do not think that anything can be done for an advanced case by any known means. Indeed any so-called cures in earlier stages may not be cases of the disease at all I hope that some new light may come and that a remedy may be found for this terrible disease which has so far baffled those who have studied it.

I am Sir yours faithfully

W HOLMAN BENTLEY
(19½ years on the Congo)

Wathen Station, Lutete Cataract Region

THE HUNTER FUND FOR THE ASSISTANCE OF THE WIDOW OF THE LATE MR H KINGSLEY HUNTER, L.S.A.

THE following are the names of the gentlemen who have consented to act on the committee for the management of this fund: Dr Major Greenwood 243, Hackney road, N E., honorary secretary Brussels Medical Graduates Association Mr George Jackson 10, Portland villas Plymouth, vice-president (late President), Incorporated Medical Practitioners Association Surgeon Captain R R Sleman 8 Portman-street, W Mr M. Cursham Corner 113, Mile End-road E Member of Council, Incorporated Medical Practitioners Association Mr Joseph Smith 15 Bath road Bedford park W President of the Society of Members of the Royal College of Surgeons of England and Mr Rivers Willson 42, Wellington-square Oxford vice-president Incorporated Medical Practitioners Association (treasurer and honorary secretary *pro tem*).

The treasurer asks us to acknowledge the receipt of the following donations —

	£	s.	d.		£	s.	d.
Mr M Cursham Corner	1	1	0	Mr T E Lloyd (Abergavenny)	1	1	0
Dr Major Greenwood	1	1	0	Mr	1	1	0
Mr A. Arthur Hill (Tunstall)	1	1	0	Mr Balding (Royston)	0	5	0

Oxford, March 28th, 1899

BURIAL AT SEA.

AN able and usually sensible member of the staff of our contemporary the *Referee* has lately been to Gibraltar by sea. The voyage he says reduced him to a state of semi torpidity but he was aroused from this state by a restless passenger who told him that there had been a death on board and that "they're going to throw the body into the sea at six o'clock to-night They'll stop the ship for the purpose it will be worth seeing Accordingly when he felt the ship stop he proceeded to the spot where the ghastly ceremony had been indicated as about to take place." In a couple of seconds the ship went on again The writer then goes on to suggest that as the deceased was only a bath attendant he was buried in a much less ceremonious way than would have been a passenger A correspondent who is a ship's surgeon of some standing writes to us to say that he has had his attention called to this garbled account and points out what we should have thought most people

sure First, that the cessation of the ship's stopping is just before the conclusion of the service when the body is released from the grating, the reason being obvious—namely, to prevent the chance of the corpse being caught by the propeller blades. Secondly, our correspondent points out that the service of the Church is the same for all, high or low. We are unable to see why anyone should take the trouble to write about a necessary and very solemn ceremony in such a manner. There is nothing ghastly about a burial whether at sea or on shore and as a matter of fact a burial at sea is often far more impressive than any burial on shore. That there may be no mistake about the article from which we have quoted we may mention that it appeared in the *Referee* of Feb. 12th, 1899.

"THE THERAPEUTICS OF COMFREY"

To the Editors of THE LANCET.

SIRS,—For the information of your correspondent "W. S." in THE LANCET of March 11th asking particulars concerning the therapeutics of comfrey and chelidonium I have copied out the accompanying notes from an old book on Herbs, published in 1787, entitled "The English Physician ... Medicines made of English Herbs that were not in any Impression until This," by Nich. Culpepper, Gent., Student in Physic and Astrology.

COMFREY.

The common great comfrey helpeth those that spit blood or make bloody urine. The root boiled in water or wine and the decoction drank, helps all inward hurts, bruises, wounds, and ulcers of the lungs and causeth the phlegm that oppresseth them to be easily spit forth. It helpeth the defluxion of rheum from the head upon the lungs, the fluxes of blood or humours by the belly, women's immoderate courses as well the reds as the whites, and the running of the reins happening by what cause soever. A syrup made thereof is very effectual for all those inward griefs and hurts and the distilled water for the same purpose also and for outward wounds and sores in the fleshy or sinewy parts of the body whatsoever, as also to take away the fits of agues and to allay the sharpness of humours. A decoction of the leaves hereof is available to all the purposes but not so effectual as the roots. The roots being outwardly applied help fresh wounds or cuts immediately, being bruised and laid thereto, and is special good for ruptures and broken bones; yea, it is said to be so powerful to consolidate and knit together that if they be boiled with divers pieces of flesh in a pot it will join them together again. It is good to be applied to women's breasts that grow sore by the abundance of milk coming into them, also to repress the overmuch bleeding of the hæmorrhoids, to cool the inflammation of the parts thereabouts, and to give ease of pains. The roots taken fresh, beaten small, and spread upon leather and laid upon any place troubled with the gout doth presently give ease of the pains and applied in the same manner giveth ease to pained joints and profiteth very much for running and moist ulcers, gangrenes, mortifications, and the like."

CHELIDONIUM OR CELANDINE.

"Is called chelidonium from the Greek word χελιδών, which signifies a swallow, because they say that if you put out the eyes of young swallows when they are in the nest the old ones will recover their eyes again with this herb.

"It is an herb of the sun and under the celestial Lion and is one of the best cures for the eyes, for all that know anything in astrology know that the eyes are subject to the luminaries. Let it then be gathered when the sun is in Leo and the moon in Aries applying to this time; let Leo arise; then may you make it into an oil or ointment, which you may please, to anoint your sore eyes with. I can prove it doth both by my own experience and the experience of those to whom I have taught it that most desperate sore eyes have been cured by this only medicine and then, I pray, is not this far better than endangering the eyes by the art of the needle? For if this doth not absolutely take away the film, it will so facilitate the work that it may be done without danger. The herb or root boiled in white wine and drank, a few aniseed being boiled therewith, openeth the obstructions of the liver or gall, helpeth the yellow jaundice and often using it helpeth the dropsy and the itch, and those that have old sores on their legs or other parts of their body. The juice thereof taken fasting is held to be of singular good use against the pestilence. The distilled water with a little sugar and a little good treacle mixed therewith (the party upon the taking being laid down to sweat a little) hath the same effect. The juice dropped in the eyes cleanseth them from all films and cloudiness which darken the sight, but it is best to allay the sharpness of the juice with a little breast milk. It is good in old filthy corroding creeping ulcers wheresoever to stay their malignity of fretting and running and to cause them to heal more speedily. The juice often applied to tetters, ringworms, or other such like spreading cankers will quickly heal them and rubbed often upon warts will take them away. The herb with the roots bruised and bathed with oil of camomile and applied to the navel taketh away the griping pains in the belly and bowels and all the pains of the mother and applied to women's breasts stayeth the overmuch flowing of the courses. The juice or decoction of the herb gargled between the teeth that ache easeth the pain and the powder of the dried root laid upon an aching, hollow, or loose tooth will cause it to fall out. The juice mixed with some powder of brimstone is not only good against the itch but taketh away all the discolourings of the skin whatsoever, and if it chance that in a tender body it causeth any itchings or inflammations by bathing the place with a little vinegar it is helped.

The lesser celandine or pilewort is under the dominion of Mars, and behold here another verification of the learning of the ancients—viz., that the virtue of an herb may be known by its signature as plainly appears in this, for if you dig up a root of it you shall perceive the perfect image of the disease which they commonly call the piles. It is certain by good experience that the decoction of the leaves and roots doth wonderfully help piles and hæmorrhoids, also kernels by the ears and throat, called the king's evil, or any other hard wens or tumours."

In addition, I find in the Extra Pharmacopœia (ninth edition) by Martindale, p. 490, a note on Chelidonium Majus, with references to *Brit. Med. Jour.* (Epitome), vol. ii., 1896, p. 83, and vol. ii., 1897, p. 47; *Brit. Med. Jour.*, vol. i., 1897, pp. 25, 354, and 657, and vol. ii., 1897, p. 125; THE LANCET, August 29th, 1896, p. 629, Dec. 19th, 1896, p. 1778, and Sept. 18th, 1897, p. 737; *Pharmaceutical Journal*, vol. i., 1897, p. 86, and vol. i., 1898, p. 61; Ancient Uses—*Medical Press and Circular*, vol. i., 1897, p. 375, some of which may be of service to your correspondent.—I am, Sirs, yours faithfully,

ALFRED HOLLIS, M.D. Edin.

Freshwater, I.W., March 14th, 1899.

"THE STOCKPORT BRANCH OF THE ST. JOHN AMBULANCE ASSOCIATION."

WE have received from Dr. L. M. P. Christian of Stockport copies of letters sent by him to Mr. A. E. Ferns, honorary local secretary of the above-mentioned branch, and to Sir Herbert Perrott, chief secretary of the Association. In the former of these letters Dr. Christian expressly declines to submit for the consideration of the local centre the exposures which he "feels most unwillingly forced to make," as he is convinced of the necessity for having the unbiassed judgment of higher authorities. In his letter to Sir Herbert Perrott Dr. Christian makes an appeal for an investigation of the condition of the Stockport Branch by the Central Executive Committee. He also mentions that nearly 90 would-be pupils are waiting to commence a course of instruction in first aid, but he says that he, as a member of the Stockport Medical Society and of the local centre of the St. John Ambulance Association, respectfully declines to conduct these classes until either apologies are offered by certain parties or decided changes are made in the constitution of the local centre. With this resolution formed by Dr. Christian not to continue his useful work until the affairs of the local branch of the Association are put into order we have every sympathy and in this sympathy every medical man who knows the circumstances that have taken place at Stockport will join.

A Subscriber.—If our correspondent lives in as good or in a better situation as regards the public convenience than does the successor of the resigning officer he can justify his candidature. He has regularised his position by giving the practitioner in question notice and he must decide for himself whether he will compete. If he does he will infringe no law of medical etiquette, but a hard-and-fast line cannot be laid down which will meet every individual case.

E. W. C.—We regret to say that the fee is the legal one when the medical man resides in the city, borough, or parish where the magistrate sits.

Civil Surgeon.—We think so. We will ascertain if the point has previously arisen and if any decision has been arrived at upon it.

T. T.—The condition is very common as the medical adviser of the child has already pointed out.

Wellwisher should consult his medical man.

Staff.—Yes.

During the week marked copies of the following newspapers have been received: *Stockport Advertiser, Chester Chronicle, Macclesfield Courier, West London Courier, Birmingham Post, Barnet Press, Dundee Advertiser, Sun, Newcastle Journal, Western Morning News, Sheffield Daily Telegraph, ... British Daily Mail, Glasgow Herald, Scotsman, Liverpool Daily Post, Times of India, Pioneer Mail, Arc Leet, Citizen Builder, Yorkshire Post, Bristol Mercury, The Critic, Manchester Guardian, ... Express, Leeds Mercury, Southport Visitor, Advertiser, Dumfries Borough Gazette, Surrey Advertiser, Surrey Gazette, ... Leader, Clifton Chronicle, Bideford Weekly Gazette, ... Daily News, Gloucester Journal, Aberystwyth Observer, ... Express, Warwick Times, Courier, Sunderland Morning Mail, Salford Advertiser, ... Gazette, Sanitary Record, Fife County Herald, North Devon Herald, Kent Herald, Blackpool Times, Royal Cornwall Gazette, ... Journal, Reading Mercury, ... Press, Hertfordshire Mercury, Local Government Chronicle, Grimsby Times, Lisburn Standard, Evening Standard and ... Surrey Advertiser, Local Government Journal, The ... Post, Windsor Chronicle, ... Free Press and ... Herald, Dewsbury ... Times, ... Standard, ... County Guardian, Tamworth Herald, ... and Sussex Courier, &c., &c.*

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An Address

ON

THE OPERATIVE TREATMENT OF VARICOSE VEINS

A RECORD OF 50 CASES OF TRENDELENBURG'S OPERATION AND OF TWO CASES OF EXCISION OF LARGE THROMBI

Delivered at a Meeting of the Norwich Medico-Chirurgical Society on March 7th, 1899,

BY A PEARCE GOULD, M S LOND, F R C S ENG,

SURGEON TO THE MIDDLESEX HOSPITAL.

GENTLEMEN,—I do not propose to discuss before such an audience as this the question as to whether operative treatment is or is not demanded by a large number of patients suffering from varicose veins While no doubt we should differ as to the exact proportion of cases in which the surgeon's aid is needed to relieve the patient we shall, I presume, all agree that many of the large army of sufferers from varicose veins derive but very imperfect relief from the various forms of stocking and bandage which are so commonly recommended and are most appropriate subjects for relief by operation Nor will I weary you with an account of all the varieties of operation which have been devised for this affection My aim is to submit to you the facts which I have been able to gather from my own experience of the simplest of all of these operations in the hope that you will agree with me that although the simplest it is probably the best at our command.

Five and twenty years ago—a time which most of us can well remember—the only operation which was performed for varicose veins in the lower limb was that known as "pinning" A hare-lip pin was passed beneath the affected vein, a piece of bougie was laid over the vessel, and a thread of silk was firmly twisted in figure-of-eight over the ends of the pin so as to compress the vein between the bougie and the pin It was hoped that this pressure would effect permanent obliteration of the vein by a process of plastic phlebitis In some cases the object was secured, but it was not uncommon to find the vein still patent when the pin was withdrawn, and, still worse, in those pre-antiseptic days suppuration at the needle punctures, infective thrombo-phlebitis, erysipelas septicæmia, and pyæmia occasionally occurred The operation was eminently uncertain in its results and fails altogether to satisfy the demands of the surgeons and patients of to-day It is now, I suppose, extinct, it certainly deserves to be, and we may safely predict that it has sunk into a dishonoured grave from which there will be no resurrection

With the great revival of surgery that followed upon the adoption of antiseptic methods varicose veins were subjected to more radical and satisfactory measures In 1875 the late Mr John Marshall advocated and reintroduced the operation of excision of varices and in one form or another this has been very largely employed during the last 15 or 20 years With proper precautions it is a safe procedure and so far as the particular varix attacked is concerned the operation is radical and final There are however, at least two drawbacks to the operation as usually practised (1) the time occupied in excising a number of varicose veins is often considerable and out of proportion to the gravity of the affection, indeed in some cases the varices are so numerous that their excision is practically impossible, and (2) the operation in some cases fails to relieve the discomfort or disability caused by the varices, and in others it fails to prevent the development of fresh varices Yesterday I saw a patient from whom I excised several large varices in both thighs and legs in the early part of 1891 In the right thigh is a scar some 12 or 13 inches long and in the leg is another eight inches long There is a large varix immediately behind the lower part of the scar in the thigh and in the leg are numerous varices some close to others far removed from, the scar on the inner side The leg still swells during the day and it is obvious that there has been a considerable re-development of varices since the operation and that the symptoms of the disease are little if at all improved

My object, however, is not so much to discuss the value of excision of varicose veins as to lay before you the results of my experience of Trendelenburg's operation for this condition In 1891 Trendelenburg[1] published a very interesting paper the main points of which I may thus summarise 1 He states that there is a variety of varicose veins in which the disease begins as a dilatation of the internal saphena trunk in the thigh and that subsequently the radicles of this vein enlarge 2 He states that the dilatation of the internal saphena vein renders its valves inefficient and that as there are no valves in the common femoral, iliac, and caval veins it follows that the superficial veins of the leg have to support the weight of a very long column of blood and under this weight their walls yield and the tubes dilate The veins from the diaphragm to the ankle then form a long series of communicating tubes in which the blood is under the influence of gravity When the patient is upright the blood presses down into the lower part of these tubes—the veins of the leg, and when he is horizontal, and still more when the leg is raised, the veins empty themselves into the vena cava and the right heart 3 Trendelenburg points out that in such a case if the patient is placed recumbent and the affected leg is raised so as to empty the varicose veins and pressure is then made over the internal saphena vein above the varices, on resuming the upright position the varices do not fill out as before but remain lax and only partially filled, while immediately on removing the pressure upon the vein above the varices become distended 4 He therefore advocates excision between double ligatures of a short piece of the internal saphena vein in the thigh to protect the varices from the pressure and reflux of blood from the common femoral vein and venous trunks above it

Much of this paper is, I think, open to criticism For example, the regular spread of the varix from the internal saphena vein in the thigh to the trunk and radicles of the vein in the leg is not often seen, and it is at least very doubtful whether this simple mechanical view of the pathology of varicose veins is the correct one But leaving aside these merely theoretical considerations there are very important practical points in Trendelenburg's paper The first is what I am in the habit of calling "Trendelenburg's symptom"—the emptying of the varices by mere posture, raising the limb, and their continuing empty or but partially filled out when the upright position is resumed, so long as the saphena vena in the thigh is compressed The degree to which this effect of pressure upon the vein in the thigh is seen varies somewhat, but I do not think it is ever altogether absent in any case of varix of this vein or its radicles, the constancy and marked nature of this effect is always a surprise to those who are not familiar with it This symptom was known before Trendelenburg drew attention to it In varicocele it was long ago observed and the treatment of varicocele by a truss pressing upon the spermatic veins in the inguinal canal is based upon it His operation consists in making an incision about two inches long over and down to the upper part of the internal saphena vein, the vessel is carefully isolated, tied at the upper and lower end of the exposed part, and the intervening inch or so is cut away The wound is sutured and dressed with three or four layers of gauze and collodion This is a very simple procedure—in that respect vastly superior to the older method of excision of varices, and if or when it is found to be effectual it must of necessity supplant the more troublesome operation of extensive excision I find on referring to my notes that I have operated by Trendelenburg's method—or a modification of it—on 50 patients and 64 limbs 49 of these patients have passed out of my hands and the fiftieth case is now in hospital, having been operated upon three days ago[2]

In any attempt to appreciate the value of this operation an account of its immediate results up to the time the patient leaves the surgeon s hands is of no value It is all-important to learn the later history of our patients With this object I wrote to my 50 patients and although some of the letters brought no response, in 39 out of the 50 cases I have obtained a statement of the present state of the patients and I have seen 25 of the patients within the last few days For convenience I have arranged the facts in the annexed table which gives the age and sex of the patient the date of

[1] Beiträge zur Klinischen Chirurgie, letzter Band 1891, S 195.

[2] Since this address was delivered at Norwich this patient has left the hospital and I have therefore included her case in the table [illegible]

TABLE OF 50 CASES OF TRENDELENBURG'S OPERATION FOR VARICOSE VEINS

No.	Age	Sex	Date of operation.	Condition before operation	Result
1	46	M	30/9/95	A mass of large varices just above and on the inner side of the left knee extending along the inner side of the leg; unable to work on account of pain.	Seen 4/3/99.—Vein was ligatured in lower third of thigh. Has worked as an agricultural labourer ever since operation. For the first two years the varices steadily diminished in size. Lately a varix has developed above the scar and communicates with the varix below which has recently enlarged. Varix above the scar is sometimes painful.
2	30	F	29/2/96	Internal saphena vein enlarged from Scarpa's triangle to the ankle; a large varix at the inner side of the knee, a second large varix crossing in front of the leg just below the tubercle of the tibia; many smaller varices along inner side of the leg.	Seen 4/3/99.—Vein was ligatured in middle third of thigh. Varices have all practically disappeared. No pain.
3	20	F	18/3/95	Varices in the lower part of the inner side of the right leg and calf.	No report.
4	36	F	20/3/96	Varices at the inner and lower part of the right leg and one or two in mid thigh.	Seen 4/3/99.—Vein was ligatured at the inner side of the right knee. Varices very small; pain equally in both legs before and during menstrual periods. No varices in the left leg.
5	20	F	9/4/96 Double	Varix of the left internal saphena vein below head of the tibia. Varix of right internal saphena vein from Scarpa's triangle to just below the knee.	Seen 4/3/99.—Left vein was ligatured at the inner side of the knee; varices have disappeared. Right vein was ligatured at inner side of the knee; varix above continuous by a large vein with varix below the scar; no improvement in the varices. On the whole less pain than before operation.
6	27	F	2/5/96	Large varix crossing lower third of the thigh obliquely down and out; another crossing front of knee below the patella; several small varices over the calf especially on outer side.	Letter 27/2/99.—"Vein smaller; can do all my work, and only after any extra exercise do I feel any pain."
7	21	M.	27/5/96 Double	A mass of varices on the right calf; another mass in front of the ankle a dilated but non tortuous vein at inner side of the knee. The same conditions on the left side and in addition a bunch of varices on the inner side of the thigh close above the knee.	Seen 16/7/97.—Much better for the operation; varices in the thighs have disappeared; those over the calves much smaller and less tense. Letter 25/2/99.—Able to do all his work without pain; greatly benefited by the operation.
8	2	M.	3/6/96	Varices in the left calf. Suffered severely in spite of wearing elastic stockings; could hardly walk."	Seen 4/3/99.—Ligature at the junction of the upper and middle thirds of thigh. Varices smaller soft. "Absolutely no pain since operation."
9	19	F	4/6/96	No record	No record.
10	28	M	12/6/96 Double	Varices in both calves and in right internal saphena vein in thigh.	Nothing known.
11	23	F	17/6/96 Double	A small varix above the right knee; another in upper part of the leg and small scattered ones over the outer side of the leg and dorsum of the foot. On left side a bunch of varices above the knee and a long varix on inner side of leg. A small ulcer below inner ankle.	Letter 27/2/99.—Patient is in the ninth month of her first pregnancy. She writes: "I have derived great benefit from the operation. The large veins seem to swell occasionally almost as much as before; although I do not suffer with them."
12	24	F	24/6/96 Double	Large varices in the left thigh and leg especially at middle of the thigh. On the right side larger varices in the leg, smaller in the thigh.	No record.
13	25	M	6/7/96 Double	Internal saphena vein enlarged from the groin to the foot on each side; on the right side a large pouch opposite the knee and a sinuous varix just below the knee. On the left side a large tortuous varix at middle of the thigh.	Seen 4/3/99.—Right veins were tied at middle of the thigh; varix just above the scar communicating with the varix immediately below. Right veins are painful occasionally much less than before operation. Left vein tied at the junction of the upper and middle thirds of the thigh; no varix above the scar; varices below much smaller. At work without bandage as an indoor servant.
14	48	M	6/7/96	Left internal saphena vein enlarged from the groin to just above middle of the leg with a larger bunch of varices at inner side of the upper part of the leg.	Seen 4/3/99.—Vein tied in middle of the thigh. Varices barely visible. No pain. At work as engine-driver; does not wear a bandage.
15	53	M	22/7/96	Many very large varices on inner side of the lower third of the left thigh and along inner side of the leg.	Seen 4/3/99.—Vein ligatured in middle of the thigh; no varices above; varices over the calf shrunk and soft. Pain in calf at night after much walking; has lost the languor and sense of weight. Thrombosis occurred at inner side of the leg five days after operation.
16	17	F	29/7/96	Varix on inner side of the calf and a small one crossing the lower part of front of thigh. The varix first appeared in the calf and then spread to the thigh.	Letter 26/2/9—"Veins much smaller; I suffer scarcely any pain except when over tired from long standing."
17	21	F	29/7/96	Varices and an ulcer at the lower part of the leg. Left hospital on the thirteenth day; ulcer healed.	No record.
18	22	M.	29/7/96	Right internal saphena vein enlarged along its whole course; a large varix on inner side of the thigh just above the knee; two or three varices over the calf and above the inner ankle.	Seen 4/3/99.—Vein was ligatured just above the knee. Varices above scar communicating with those below not diminished in size. No pain. Works as a farmer; does not wear a bandage.
19	25	M	31/7/96	Left internal saphena vein dilated and tortuous from mid thigh to lower third of the leg with a mass of varices at inner side of the calf. The varices appeared first at calf and then spread up the thigh and down the leg.	Letter 28/2/99.—"If I did not see my veins should not know I had them. The veins are not smaller, but he has lost all his pain."
20	23	F	10/10/95	Varices on inner side of each leg and behind the knee; larger on the left side.	Operation on the left side only. No further record.
21	19	M.	9/1/97 Double.	Both internal saphena veins were enlarged from groin to ankle; several large varices across each calf and a very prominent thin walled loop three inches below the right knee.	Letter 1/3/99.—Veins have not altered in size.
22	27	F	14/1/97 Double	Both internal saphena veins were varicose in middle of thigh; several varices in right calf.	Seen 4/3/99.—The right vein was ligatured about the middle of the thigh; several varices developed at scar; in other respects the condition of the limb was unaltered. The left vein was ligatured in the upper third of thigh; varices were considerably diminished; no pain.

TABLE OF 50 CASES OF TRENDELENBURG'S OPERATION FOR VARICOSE VEINS—*(continued)*

No.	Age	Sex	Date of operation.	Condition before operation	Result.
23	29	F	16/2/97	A large varix at the inner side of the knee and another at lower part of the thigh small ones at the inner ankle Great aching in the whole limb when up, preventing walking the limb was very tender at night.	Letter 27/2/99.—Walks very fairly leg aches less the nocturnal tenderness is unaltered.
24	26	F	3/4/97	Several large varices over the right leg and dorsum of the foot. A healed ulcer over the lower third of the right leg from which a hard tender cord extended up in course of the internal saphena vein. Vein in the thigh was not felt	Seen 4/3/99 —Vein ligatured at junction of the middle and lower thirds of thigh slight development of varices about the scar varices in the leg very lax no pain The scar of the ulcer is soft and non adherent.
25	29	M.	29/4/97	Right internal saphena vein enlarged from saphena opening to three inches below the knee.	No record
26	25	F	1/5/97	No detailed record.	Seen 4/3/99.—Veins ligatured in lower quarter of the right thigh varices much smaller much less painful than before operation still has slight pain around ankle
27	34	F	20/5/97	Left internal saphena vein in the thigh was enlarged to the size of the index finger three ulcers in lower third of the leg.	No record.
28	20	F	26/5/97	Numerous varices in front and on inner sides of the lower fourth of the right leg Similar varices in upper part of the right calf large varix above the right knee and almost nævoid patches on inner side of the middle of thigh.	Right side only operated on. No late record.
29	18	M.	2-/6/97	Varices on inner side of the right leg	Seen 4/3/99 —Vein tied at junction of upper and middle thirds of the thigh. Vein above the scar dilated and communicating with the vein below says varices are larger than before the operation
30	34	M	13/7/97	A large pouch like sac on inner side of the right knee a large mass of varices on front of the leg below the calf	Seen 22/3/99 —Veins have shrunk and practically disappeared No pain and no œdema is working full time
31	22	F	18/12/97 Double	On the left side a large vein was running from behind the internal malleolus above the ankle varices at junction of lower and middle thirds of the other side a large varix running obliquely up and in across the lower third of the thigh and on up to Scarpa's triangle On the right side many large veins on the front of leg, a large varix below the knee and extending up along the inner border of the ham for three inches above the knee.	No record
32	37	F	5/1/98	Several varices scattered over the leg some were excised two years ago without permanent relief of pain.	The patient is a nurse she is now able to do her work without pain.
33	2	M.	3/2/98	A large dilated vein ran along the inner side of the left calf ending in a knot" about the middle of the thigh.	Letter 2/3/99 — Result entirely satisfactory "No pain. I am able to do my full amount of work"
34	52	F	24/2/98 Double.	Many varices in both limbs for 25 years had worn elastic stockings on the legs and thighs (25 years) had had four attacks of thrombosis. "Never any comfort sitting, standing, or lying."	Seen 4/3/99 — Quite a different woman" Walks with the greatest comfort and never gives a thought to the veins The varices have disappeared from the thighs in the legs they give no trouble but she cannot walk without a bandage up to the knees as the legs are too weak."
35	30	M.	23/2/98 Double.	Numerous large varices in both legs gradually spreading up the saphena vein in the thighs complained of a sense of dulness in the legs."	Seen 9/12/98.—Varices hardly visible in the right leg in left leg they are small and lax the sense of dulness has disappeared An officer in the army would have been disqualified for active service but now is in splendid condition.
36	33	F	12/3/99 Double	Right internal saphena vein varicose from the ankle to within one and a half inches of the groin, very large in upper part of the thigh. Veins on the inner side of the left leg, calf and knee numerous large and tortuous. A large globular swelling about the middle of the inner side of the thigh where a large branch from the outer side of thigh joined the internal saphena trunk There were patches of atrophy of the skin in lower third of leg.	Seen 4/3/99 —Vein ligatured in upper third of the thigh There is much less pain and discomfort varices very much smaller none projecting at the knee Some sense of fulness and heaviness about the left ankle and behind the left knee.
37	33	F	5/3/98	A large bunch of varices on inner side of the right calf a short varix on internal saphena vein in the thigh aching pain during the day and often at night also	Letter 28/2/99 — My veins are almost well and I do not feel any pain or discomfort unless I walk about three or four miles in the day or stand for a long time they do not ache at night or when I am sitting as they used."
38	19	M.	5/5/98	Varix behind and on inner side of the left knee extending up to Scarpa's triangle	Seen 4/3/99 —Vein ligatured at the groin. Varices hardly visible Legs and thighs very small he complains of pain in the ankles when he walks far but less since the operation.
39	39	M.	5/5/98	A large varix from middle of the thigh to the ankle very large just above the knee	Seen 4/3/99 —Vein ligatured at junction of upper and middle thirds of the thigh Varices over lower third of the thigh and around the knee shrunken. He says the pain is worse than before operation this pain is felt at the back of the lower part of the thigh and on each side of the knee. He stands all day at his work.
40	46	F	2/6/98	Varix on inner side of the left knee with a thick walled large vein running up to near the saphenous opening, where more enlarged and tortuous veins were seen.	Seen 28/2/99 —Vein tied at its upper end Varices have continuously shrunk since operation she is quite free from pain in spite of very hard work as a nurse.
41	36	F	8/6/98	Varices from the junction of upper and middle thirds of the right thigh to about three inches below the knee a large varix on outer side of the right ankle	Letter 1/5/99 —"Since operation veins have gradually got smaller only being large and painful at the monthly periods."
42	43	M	22/6/98	Left leg and foot covered with large varicose veins another varix on inner side of the left knee numerous dilated veins in the right leg, but not so large Varices first noticed 22 years ago in left calf	No record.
43	22	F	23/6/98	Varix on inner side of the right leg a junction of lower and middle thirds. No varix on internal saphena vein in the thigh Suffered great pain in her work as draper's assistant.	Seen 4/3/99 —Vein ligatured at the groin Varices have disappeared. She says she has not had any pain or discomfort since operation.

TABLE OF 50 CASES OF TRENDELENBURG'S OPERATION FOR VARICOSE VEINS—(*continued*)

No	Age	Sex	Date of operation.	Condition before operation	Result.
44	14	M	3/5/98	A small varix at inner side of the right knee	Seen December 1898.—Vein ligatured in the groin. The varix has disappeared
45	—	F	22/10/98	A very large pouch on the internal saphena vein at the knee, several large varices in the leg. Complained of great pain	Seen 24/2/99.—Vein ligatured at the groin. Varices have much diminished the large pouch at the knee has shrunk to a sixth of its former size. Much less pain.
46	25	F	10/11/98	Varices on inner and posterior surfaces of the left thigh and leg, noticed below the knee 10 years ago, above the knee three years ago.	Letter 28/2/99.—"Veins no smaller very painful sometimes during the day when I am sitting down, but not at night."
47	28	F	1/12/98	Varices in the right leg. Thrombosis in May 1896. Hæmorrhage from a burst varix May 1896, and again in May 1897. Admitted November 1898, with an unhealed ulcer in lower part of the leg	Letter 27/2/99.—"Veins in right leg smaller the hardness still remains and they swell a great deal during the day I have very little pain in that leg"
48	31	F	12/1/99 Double	Varices in both legs and in lower part of the right thigh	Patient left hospital on Feb. 3rd wounds healed veins smaller
49	24	F	9/2/99 Double.	Varix on the right leg extending across front of the knee and down to the inner ankle. On the left limb a very large varix on the inner side of upper half of leg	Seen 3/3/99.—Veins tied over Scarpa's triangle. Right varices scarcely visible. The varix in left leg shrunk, its upper end thrombosed
50	39	F	4/3/99	Varix on the right side extending from the dorsum of the foot along the course of the external saphena vein to the ham, and thence for seven inches along the course of the internal saphena vein and thigh. The whole varix fills from above from the internal saphena vein	Seen 10/3/99.—Internal saphena vein divided in the groin. Varix thrombosed from its upper end to junction of the upper middle thirds of the leg, invisible below this point.

operation, the condition of the veins before operation the condition of the veins now, and whether this last fact has been communicated to me by letter or observed by myself In the preparation of this table I have received very great assistance from Mr S B Hulke the surgical registrar of Middlesex Hospital I may here add three other facts about these cases The patients have applied for treatment almost without exception on account of more or less pain and disability for work, in every case Trendelenburg s symptom has been present and the primary recovery from the operation has been satisfactory—almost always without incident The table has not been complicated by the constant repetition of these facts

A study of the table shows that the cases are very varied and are by no means all members of a limited group such as Trendelenburg described and for which he suggested his operation I have taken the cases exactly as they have presented themselves to me for treatment, and if I have been able to demonstrate the "Trendelenburg symptom" I have submitted them to this operation No case has been rejected where this symptom has been obtained whatever the state of the veins may have been In several of the cases I have modified Trendelenburg's operation in one particular which has proved to be an important one It occurred to me that if the operation succeeded by its relieving the varicose veins from the pressure of the column of blood above them it would be as effectual if the vein were divided between two ligatures a short distance above the varix as if the vein were obstructed at its upper end Trendelenburg s description of the gradual spread of the varicose condition in a distal direction was a further inducement to occlude the vein close above the varix Wherever possible I have indicated in the table the exact seat of operation The importance of this modification was plainly seen on March 4th, when about 20 of these patients presented themselves for examination Thus in two cases (Nos 22 and 24) I found that several large veins had developed under and immediately around the scar, forming quite a group of varices And in five other cases (Nos 1, 5 13, 18, and 29) newly developed veins about the scar have formed a communication between the vein above the ligature and the varix below it, and the operation has not succeeded in permanently interrupting the long column of blood from the abdomen to the leg In these five cases (Nos. 1, 5, 13, 18 and 29) the internal saphena vein *above* the ligature has become varicose since the operation, and in at least one case this new and highly placed varix is the seat of pain Case 1 illustrates these points very well, and as I have seen the patient several times since the opera[illegible] have been able to watch the progress of events This healthy agricultural labourer who came to me in [illegible] 5, with e[illegible]ces in the left thigh (lower [illegible] which [illegible] much pain that he was [illegible] e his [illegible] f wearing elastic stock[illegible] d [illegible] burg's symptom was [illegible] e internal saphena vein in the lower third of the thigh above the top of the highest varix The man returned to his work in a fortnight and for more than two years he was able to do all his work without any pain, during this time the large varices contracted and were only partially filled out with blood During the last year, however, the saphena vein above the scar has become markedly varicose and a large vein can be plainly seen passing down from this varix alongside the scar and opening into the upper end of the varix below With the development of this vein the lower varices are filling out much more The man now complains of pain when he has a hard day's work and he refers this pain to the thigh just above the scar, it is probably caused by the varix of the saphena there

For two years the operation was entirely successful, but it has ultimately failed owing to the development of these new varices and the reopening of the direct channel from the common femoral vein to the varices The development of these varices above the ligature and in or near the scar tissue is a very interesting fact I have never seen anything at all like it in any other scars I have seen several instances, on the other hand, where the low operation has been quite successful I would refer especially to Nos 2 4 5 (right side), 13 (left side), 14 15, and 26 in the table My conclusion is that ligature of the healthy saphena vein at some distance below the groin is not by any means a certain cure for varix lower down in the limb, in some cases it succeeded but in others it failed, and I am not able to explain the different results met with As these different results may be met with in the same patient (Nos 5 and 13) it must depend upon a local condition and not upon any central condition or general state

Turning now to the cases of excision of a portion of the saphena vein near its entrance into the femoral vein I find that in no single instance has it failed to relieve the patient of all pain and that it has been invariably followed by a marked—often a very marked—shrinking of the dilated veins As an example of the extent to which this shrinking occurs I exhibit illustrations, (Fig 1 and Fig 2), taken before and after operation, of the lower limbs of the patient in Case 36—this is by no means an exceptional case The very satisfactory result of this operation is well exemplified in Cases 8 11, 30, 33, 34, 35, 36, 37, 38, 40 43, 44, and 45 in the table

So far as I have seen the usual process of "cure" of the varix is by a more or less rapid shrinking of the vein in some cases to quite its normal size, in others to just short of that, this shrinking may progress for many months In three cases thrombosis has occurred in the varix at a distance from the ligature, in two other cases thrombosis occurred in the vein immediately below the lower ligature and slowly spread down In no case have I seen thrombosis above the ligature I believe that many surgeons on the continent think it essential to keep the patient recumbent for a month after the operation in the hope that obliterative phlebitis will occur in the varices I

have only kept my patients in bed long enough to secure repair of the small wound—usually a week In one case (No 32) I had previously excised some painful varicose veins with marked temporary benefit The pain, however, returned in other veins and the patient, a surgical nurse, was greatly troubled whenever she had anything like a hard case to nurse Since the Trendelenburg operation she has been greatly relieved, is able to do all her work in comfort, and she has derived far greater and more lasting benefit from it than from excision of the varices I refer to this case particularly because it is not often that we can compare two operations for the same condition upon the same patient In one case (No 34) my chief hope in operating was that I might prevent attacks of thrombosis The patient was a lady nurse who had a nursing home and had therefore much standing and walking She had very extensive varicose veins in both limbs which had existed for 26 years For 25 years she had worn elastic bandages on the legs and thighs and in spite of that she suffered very severely from pain both in

FIG 1

Reproduced from a photograph taken before operation (No 36)

standing, sitting, and lying and in addition she had recently suffered from four attacks of thrombosis each one at a higher level in the limb than its predecessor Since the operation, now a little more than 12 months ago this patient has had no attack of thrombosis, her pain has disappeared and she stands and walks about with comfort Her only disability is that if she leaves off her bandages below the knee she feels so weak that she is afraid to walk, she attributes this to having worn tight bandages for 25 years She is a tall woman and the muscles of the legs are very small

Looking at the whole series of 50 cases I am struck by the almost uniform relief of pain the operation has afforded, in not a few cases its effect upon the pain is more marked than its effect upon the varices (Cases 1, 18 and 19) In one or two instances the trouble now complained of is not due to the varicose veins thus the patient in Case 4 complains of pain in the leg before and during her menstrual period, but this pain is quite as bad in the left leg which is and always has been quite free from varicosities Again, in Case 23 the patient still complains of a strange tenderness of the thigh and leg when she is recumbent, the operation has removed the other pain which she experienced, but has not affected the tenderness It is at least open to doubt whether this tenderness is connected with the varix at all It is, I think, evident from these cases that if we would ensure success from this very simple operation we must obliterate the saphena vein close below its entrance into the femoral vein The operation performed here is very satisfactory in its immediate and late results and where Trendelenburg's symptom is well marked may be confidently relied upon to relieve the patient's symptoms and lead to a permanent shrinking or obliteration of the varicose veins

One of the most troublesome complications of varicose veins is aseptic thrombosis—we must all have realised this It is sometimes very painful, it is not free from danger to life from embolism and the course of the disease under the common palliative expectant treatment is often exceedingly slow and not unfrequently followed by relapse Under these

FIG 2

Reproduced from a photograph taken in December 1898, after operation (No 36)

circumstances it is reasonable to try whether surgery does not afford a better means of dealing with these cases than the older methods of rest local sedatives, a moderated diet, alkaline salines and, above all, great patience I think it does For many a long year surgeons have been in the habit of incising a thrombosed pile—the same condition occurring in one of the hæmorrhoidal veins—and I have on two occasions made a free incision into large and very painful aseptic thrombi in the thigh, turned out the clot and left the wound to granulate up Both patients were relieved by the operation and made a good recovery but the healing of the wound was slow More recently I have treated two of these cases by excision of the thrombosed portion of the vein and immediate closure of the wound Union by first intention was obtained and the result has been such that I hope you will agree with me in thinking that this operation may be well recommended for this tedious and troublesome condition

CASE 1 —The first of these cases occurred in a woman aged 57 years the mother of 13 children who had noticed

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47	28	F	1/12/98	Varices in the right leg Thrombosis in May 1895 Hæmorrhage from a burst varix May 1896, and again in May 1897 Admitted November 1898, with an unhealed ulcer in lower part of the leg	Letter 27/2/99 — 'Veins in right leg smaller the hardness still remains and they swell a great deal during the day I have very little pain in that leg "
48	31	F	12/1/99 Double	Varices in both legs and in lower part of the right thigh.	Patient left hospital on Feb. 3rd wounds healed veins smaller
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Reproduced from a photograph taken before operation (No 36)

standing, sitting, and lying and in addition she had recently suffered from four attacks of thrombosis each one at a higher level in the limb than its predecessor Since the operation, now a little more than 12 months ago this patient has had no attack of thrombosis, her pain has disappeared and she stands and walks about with comfort Her only disability is that if she leaves off her bandages below the knee she feels so weak that she is afraid to walk, she attributes this to having worn tight bandages for 25 years She is a tall woman and the muscles of the legs are very small

Looking at the whole series of 50 cases I am struck by the almost uniform relief of pain the operation has afforded, in not a few cases its effect upon the pain is more marked than its effect upon the varices (Cases 1, 18 and 19) In one or two instances the trouble now complained of is not due to the varicose veins, thus the patient in Case 4 complains of pain in the leg before and during her menstrual period, but this pain is quite as bad in the left leg which is and always has been quite free from varicosities Again, in Case 23 the patient still complains of a strange tenderness of the thigh and leg when she is recumbent, the operation has removed the other pain which she experienced, but has not affected the tenderness It is at least open to doubt whether this tenderness is connected with the varix at all It is, I think, evident from these cases that if we would ensure success from this very simple operation we must obliterate the saphena vein close below its entrance into the femoral vein The operation performed here is very satisfactory in its immediate and late results and where Trendelenburg's symptom is well marked may be confidently relied upon to relieve the patient's symptoms and lead to a permanent shrinking or obliteration of the varicose veins

One of the most troublesome complications of varicose veins is aseptic thrombosis—we must all have realised this It is sometimes very painful, it is not free from danger to life from embolism, and the course of the disease under the common palliative expectant treatment is often exceedingly slow and not unfrequently followed by relapse Under these

FIG 2

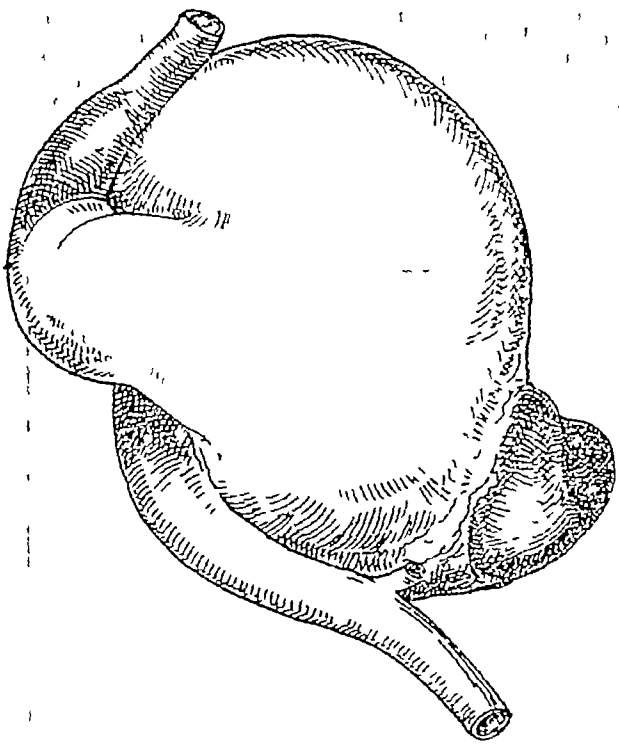
Reproduced from a photograph taken in December [illegible] after operation (No. 36)

circumstances it is reasonable to try whether surgery does not afford a better means of dealing with these cases than the older methods of rest local sedatives, a moderated diet, alkaline salines and, above all great patience I think it does For many a long year surgeons have been in the habit of incising a thrombosed pile—the same condition occurring in one of the hæmorrhoidal veins—and I have on two occasions made a free incision into large and very painful aseptic thrombi in the thigh, turned out the clot and left the wound to granulate up Both patients were relieved by the operation and made a good recovery, but the healing of the wound was slow More recently I have treated two of these cases by excision of the thrombosed portion of the vein and immediate closure of the wound Union by first intention was obtained and the result has been such that I hope you will agree with me in thinking that this operation may be well recommended for this tedious and troublesome condition

CASE 1—The first of these cases occurred in a woman aged 57 years the mother of 13 children, who had noticed

enlarged veins in the left leg ever since her fourth confinement Some years ago a much larger venous swelling appeared on the inner side of the leg just below the knee She compared its size to that of a hen's egg and told me that she noticed that when she lay down this swelling collapsed

FIG 3.



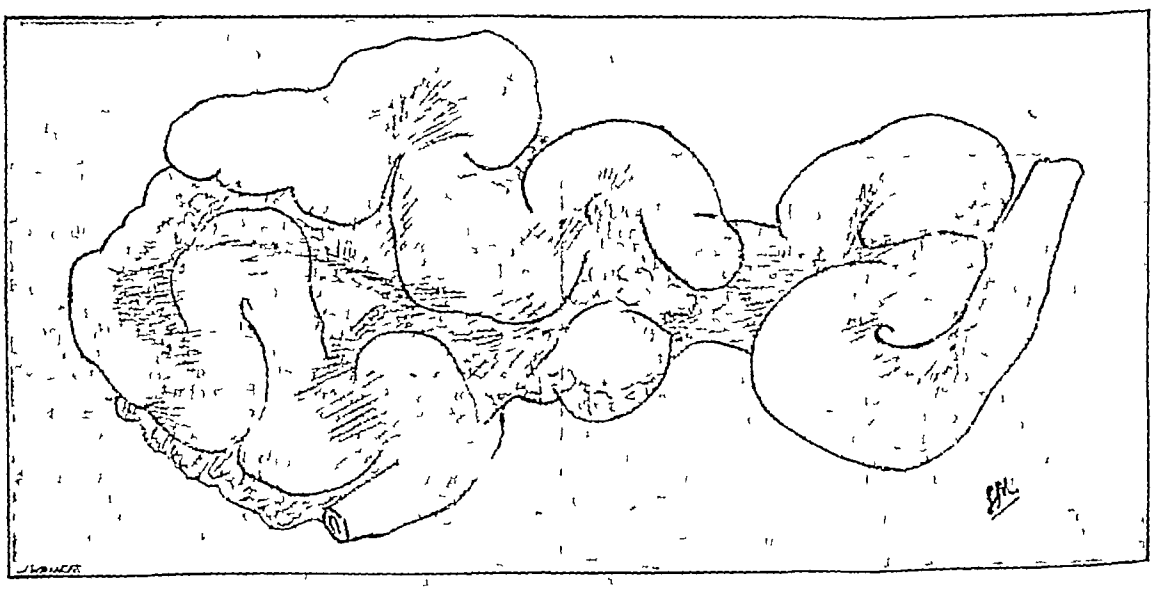
The thrombosed varicose vein excised in Case 1 (natural size)

and would hang down as a bag when she stood up She experienced no pain in this pouch until Sept 26th, 1898 when without known cause this large venous pouch became the seat of acute pain, it was found to be hard and the skin over it red She was admitted to hospital on Oct 3rd and I found a stout woman with extensive varices in the left thigh and leg and a very large thrombosed venous pouch just below the knee. She complained of severe pain and the swelling was very tender The skin over and around it was of a deep red colour Her pulse was 72 and her temperature was 99°F (this became normal on Oct 4th and continued so) I raised the limb by a pillow, enjoined absolute rest, careful diet, attention to the bowels, and locally I ordered hot belladonna fomentations Under this treatment the pain subsided, but the swelling showed no signs of lessening and it continued very tender On Oct 20th I excised this thrombosed varix The wound healed by first intention and the patient left the hospital with a sound leg on Nov 5th—16 days after the operation I saw her on March 4th, 1899, she was then well and had experienced great indirect benefit from the operation For while formerly she had a good deal of pain in the limb and experienced difficulty in getting about her work, now she is free from pain, gets about her work with ease, and all the varices in the limb are smaller I have preserved the parts excised and now show them to you, which absolves me from any need of describing them (see Fig 3)

CASE 2 —The second patient was a man, aged 38 years, who noticed varicosities in the left leg when 16 years of age and he states that they continued to increase up to 20 years, but not since The veins do not appear to have caused him any material inconvenience till Nov 12th, 1898, when without any injury or other known exciting cause he experienced acute pain just below the knee and found that the veins there were hard and very tender and the skin over them was reddened As getting about increased his trouble he took to his bed and when no further improvement occurred he applied at the hospital and was admitted under my care on Dec 14th, 1898 I found a large and very tortuous varix extending from over the inner condyle of the femur downwards and inwards nearly to the tubercle of the tibia, this vein was thrombosed and the skin over it was deep red in colour, swollen, and tender, there was no rise of temperature or increased pulse rate Next day, Dec 15th, I excised this thrombosed vein and when the wound was dressed on Dec 28th it was found to be firmly healed Two days later the internal saphena vein was found to be cord like for a short distance above the knee, and on Jan 1st, 1899, a small thrombus was felt in the calf five inches below the wound I therefore gave the man a few days' further rest in bed and he left the hospital well and able to get about on Jan 8th I saw him about a month later and he was then doing his usual work and was free from all trouble in his leg Fig 4 is from a drawing of the parts removed, kindly made for me by my dresser, Mr Milburn, it faithfully represents the size and disposition of the vein

In cases such as the above excision of the thrombosed vessel is, I believe, the best line of practice

FIG 4



Thrombosed varicose vein (natural size) excised on Dec. 15th 1898, in Case 2.

CHRONIC MEDIASTINITIS (INDURATIVE MEDIASTINO-PERICARDITIS)

BY THOMAS T WHIPHAM M D OXON, F R.C.P LOND,
CONSULTING PHYSICIAN TO ST GEORGE'S HOSPITAL

(Concluded from p. [illegible])

IT may be well to state here that in searching the past records of St George's Hospital pericarditis which occurs so often in children who are the subjects of rheumatism, and which is occasionally a complication of other diseases has been excluded unless the inflammatory process had involved with the pericardium other structures in the chest Further, those cases in which extensive matting together by fibrous tissue of the thoracic viscera, as the result of tuberculous pleurisy, even though complicated, as they were in many instances, by extensive pericarditis, have also been excluded as not being examples of the disease under consideration As the result of my inspection of the post mortem records of St George's Hospital I have only been able to find four instances of uncomplicated indurative mediastino-pericarditis, two of which occurred in my own practice during the period of 20 years as one of the physicians During the year 1896 two additional cases were published, one recorded by Dr R J Buchanan,[1] the other by Dr E Olliver[2] Dr G A Sutherland has published a case[3] in which he made the diagnosis of chronic mediastinitis Dr Frederick Taylor, in an address to the Nottingham Medico-Chirurgical Society,[4] relates a case of combined pleural and pericardial adhesions with mediastinitis in a woman aged 42 years Dr Blumfeld[5] gives a remarkable case of the disease in a male child, aged 15 months under the care of Dr Sequeira in the North Eastern Hospital for Children Sir Samuel Wilks, in a paper on "Adherent Pericardium as a Cause of Cardiac Disease,"[6] relates five cases of that affection, some of these are included in Dr Harris's tables, but Case 2 (that of a boy, aged nine years, and recorded in the accompanying table as Case 5) is omitted from them, presumably because there was no actual mediastinitis It is now included as being probably an instance of the disease in its earlier stage The late Dr Habershon gives full particulars of a case of fibroid thickening of the tissues in the anterior mediastinum in a male aged 37 years Sir William Gull[8] gives the outlines of a case of fibrous thickening of the tissue in the mediastinum involving the right bronchus the right vagus nerve, and branches of the pulmonary pleura The above cases are, with the exception of those recorded by Dr Buchanan and Dr G A. Sutherland, all of them complete—i e, fatal cases in which a post-mortem examination took place

Age—Referring to Dr Harris's tables it is found that the disease is of more frequent occurrence in adults than in children This is probably due to the fact that it is, as its name implies, chronic, and that a fatal termination does not as a rule, take place until after a lapse of years Of the 22 cases collected by Dr Harris nine occurred in persons under 20 years of age (one of these patients is stated in the report to have been young—the exact age is not given) 10 occurred between the ages of 20 and 30 years, three between 30 and 40 years, and one at the age of 50 years Of the cases observed by Dr Harris himself two were under the age of 20 years, the other was 50 years Sir Samuel Wilks's case occurred in a male child aged nine years Sir William Gull's in a man aged 61 years Dr Habershon's in a man aged 37 years Dr G A. Sutherland's in a male child aged eight years, Dr R J Buchanan's in a man aged 21 years, Dr E. Olliver's in a man over 50 years, Dr F Taylor's in a woman aged 42 years and Dr J Blumfeld's in a male infant aged 15 months Of the four cases collected from the records of St George's Hospital one was between 20 and 30 years (25), two were between 30 and 40 years (31 and 34), and one was between 50 and 60 years (55) According to the above figures Dr Harris's observation that the disease is more common in early life is borne out

Sex—Grouping together Dr Harris's cases (those collected from the records of St George's Hospital), and the cases recorded by Sir William Gull, Sir Samuel Wilks, Dr Habershon, Dr Buchanan, Dr Olliver, Dr Sutherland Dr F Taylor and Dr Blumfeld, the numbers amount to 36 Of these 28 were males and seven were females The sex is not stated in that narrated in Dr Henry Ashby's work on Diseases of Children, Medical and Surgical This case is included in Dr Harris's tables The figures show a proportion of males to females of four to one

Causation—On looking over Dr Harris's tabulated cases one is struck by the fact that rheumatism as an obvious cause of the disease is recorded definitely in three cases only out of his 25, while in one instance the history of rheumatism was doubtful Too much importance however, should not be attached to this fact seeing that the external manifestations of that disease are often so slight in children as to escape notice No history of rheumatism is recorded in any of the cases from St George's Hospital or in Sir William Gull's Sir Samuel Wilks's, Dr Buchanan's, Dr Olliver's Dr Habershon's, Dr Sutherland's, Dr F Taylor's, or Dr Blumfeld's In this disease chronic mediastinitis, there appears to be no particular antecedent affection which can be regarded as being especially causative—e g, in four cases scarlet fever was antecedent in three enteric fever, in two measles occurred in early life, three of the patients were heavy drinkers, two had suffered from influenza while in eight there was no history of any illness up to the onset of the attack which proved fatal One was probably traumatic (Harris, Case 1) As is shown by Dr Harris's tables, indurative mediastino-pericarditis may occur apart from tuberculous affection seeing that in but two of his collected cases (both recorded by Kussmaul) were the lungs affected by tuberculosis and in one (recorded by Claessen) a bronchial gland and some mesenteric glands were found in a caseous state, the liver spleen and kidneys were affected by miliary tubercles In two, however, of the three cases which came under Dr Harris's own observation tubercle was found in the lungs after death, in Dr Blumfeld's case the mediastinal glands were caseous Neither in my own four collected cases nor in those under the care of Sir Samuel Wilks, Sir William Gull Dr Habershon, or Dr F Taylor was any evidence of tuberculous disease found

In examining the records of the reported cases of chronic mediastinitis or indurative mediastino-pericarditis the frequent concurrence of chronic peritonitis is remarkable. Dr F Taylor in his article on Combined Pleural and Pericardial Adhesions reviews the opinions of various writers on the subject and quotes Dr Heidemann's conclusions as to the pathological sequence of events—viz "1 Chronic inflammation of all the serous membranes 2. Stagnation occasioned by degeneration of the cardiac muscle leading to ascites because on account of the chronic peritonitis the peritoneal vessels offer a locus minoris resistentiæ 3 The cirrhotic process in the liver so often observed under these circumstances is occasioned by the extension of inflammatory irritation from the capsule of the liver as well as by the chronic hyperæmia of the organ. 4 By the growth and contraction of this connective tissue in and about the liver the stagnation and exudation in the abdominal cavity are increased" These doubtless, are a sufficient explanation of the various pathological changes found in this disease, but an insufficient explanation of the primary cause of such marked examples of the chronic inflammation exhibited in Case 1 and in Dr Blumfeld's case of an infant 15 months old

Condition of the Heart at the Necropsy

Harris's cases	Cases	Other cases	Cases
Not mentioned	9	Habershon's case left ventricle dilated and hypertrophied right dilated	1
Enlarged, muscle pale and flabby thin	1	Sutherland's case not enlarged clinically	1
About the usual size	2	Gull's case healthy	1
All the cavities rather dilated	3	Wilks's case, left ventricle thin fibrous invasion	1
Right ventricle hypertrophied	1	Olliver's case, wall fatty and thickened	1
Very much enlarged	2	Blumfeld's case, hypertrophied and dilated	1
Dilated and fatty	1	F Taylor's case, right side dilated and hypertrophied	1
A little enlarged	1	*St George's Hospital cases*	
Acute endocarditis of mitral valve a focus of myocarditis	1	Healthy	2
Tubercle in heart muscle	1	Small, (?) arrested growth	1
Enlarged	1	Fibrous invasion of walls of right ventricle	1
Enlarged and dilated	1		
Left ventricle of usual size right ventricle hypertrophied	1		

[illegible]—St George's Hospital Cases—In Case 1 it was [illegible]

[1] Liverpool Medico-Chirurgical Journal, 1896, vol. xvii, p. [illegible]
[2] New York Medical Journal, 1896, vol. lxi, p. 22.
[3] THE LANCET Jan. 4th, 1896. [4] THE LANCET Oct. 4th 1893.
[5] THE LANCET Dec. 31st 1898
[6] Guy's Hospital Reports, Third Series, vol. xvi, p. 23.
[7] Transactions of the Pathological Society vol. xxviii, p. [illegible]
[8] Guy's Hospital Reports Third Series vol. v p. 312.

normal position so far as could be ascertained In Case 2 it was not recorded In Case 3 the position was normal so far as could be ascertained and in Case 4 it was not recorded. The heart was enlarged. In Dr Habershon's case it was not perceptible In Dr Buchanan's case it was in the fifth interspace, four inches from the mid sternum In Dr Olliver's case the apex beat was not seen. In Dr F Taylor's case it was in the fifth space an inch below and half an inch internal to the nipple. In Dr Blumfeld's case, in Sir Samuel Wilks's case, and in Sir William Gull's case the position of the apex was not mentioned. In Dr Sutherland's case it was not perceptible

It is evident from an examination of the above figures that hypertrophy of the heart is not necessarily a result of indurative mediastino-pericarditis It will be noticed that in nine of Dr Harris's cases no mention is made of the condition of the heart, and as it is scarcely likely that the existence of its hypertrophy would have been overlooked or omitted from the account of the necropsy by competent observers it may not be too much to assume that no increase in the size of the organ was found in these nine cases It is a matter for regret that the weight of the heart is not stated in each case and that the description of its condition is in some instances insufficient The table shows that the size of the heart varies in this disease In 11 only of the 36 cases is there distinct mention of enlargement In one instance the heart is said to have been "very much enlarged", in one it was "a little enlarged", in three instances it was "enlarged and dilated", and in two the right ventricle only was hypertrophied It may then be fairly inferred from the above recorded facts that the disease known as chronic mediastinitis or indurative mediastino-pericarditis does not, in the majority of the cases, take its origin in an inflammation primarily affecting the heart, although in some instances changes occur in the surrounding tissues which are sufficient to call forth such increased action of its muscular walls as to lead eventually to hypertrophy and occasionally to great hypertrophy

On the other hand, the mediastinal changes may be present to an extreme degree and yet the heart may at death have been healthy, as is recorded in one of Dr Harris's cases and in two of those from the records of St George's Hospital Further, in Case 1 and Case 3 given in the first part of this paper the heart was smaller than natural In these cases the diminution in size was in all probability the result of arrested development, and it may be assumed, although there is nothing in the history of these two cases to establish the fact, that inflammatory processes commenced early in life outside the heart itself, leading to chronic thickening of the pericardium, obliteration of its cavity, and arrest of the growth of the heart. Dr Chevers[9] from his own observations came to the conclusion that complete obliteration of the pericardial cavity as a result of inflammation when uncomplicated by valvular disease caused diminution rather than increase in the size of the heart, the diminution in size being due to strangulation Sir Samuel Wilks remarks in his article on Adherent Pericardium in Guy's Hospital Reports, 1871, vol xvi, p 201, that "there can be little doubt that these tough pericardial adhesions when occurring at an early period of life do impede the heart's action and in all probability its growth, that the chronic inflammatory process very often involves the vessels entering the heart within the pericardium, but that when the latter is adherent the thickening and induration proceeds, as would a growth, to involve the cellular tissue in the mediastinum and, creeping upwards, to surround even the veins in the neck" Dr J H Broadbent in his treatise on Adherent Pericardium, 1895, p 22, says "The explanation why the heart should be of normal size would be that it had not dilated during the original attack of pericarditis or else that it had recovered from the dilatation before adhesions were formed"

Pericardium —In Dr Harris's cases it was not adherent internally in two cases and was adherent in 21 cases, no details are given in two cases In Sir Samuel Wilks's case it was adherent No details are given in Sir William Gull's case It was adherent in Dr Olliver's case, in Dr F Taylor's case, in Dr Blumfeld's case, and in Dr Habershon's case In the St George's Hospital cases it was adherent extensively, the cavity was obliterated in two cases and not entirely obliterated in two cases

As the name "mediastino-pericarditis" suggests, the pericardium is usually more or less affected by the chronic inflammatory process and in the majority of the cases the cavity is either partially or entirely obliterated by fibrous adhesions There were no adhesions between the parietal and visceral layers in two of Dr Harris's cases

Pulse —In Dr Harris's cases the pulse when recorded was always over 100 In Dr Habershon's case the pulse was 70, irregular, feeble, and compressible In Dr Buchanan's case pulsus paradoxus was present—the rate was not recorded, it was of low tension In Sir Samuel Wilks's case pulsus paradoxus was present, small, usually about 100 In Dr Olliver's case the pulse was 96, no peculiarity was mentioned In Dr Sutherland's case the pulse was soft, no peculiarity was mentioned In Dr F Taylor's case the pulse was from 96 to 104, regular, feeble, and compressible. In Dr Blumfeld's case the pulse was 80 In Dr Habershon's case the pulse was 70, irregular, feeble, and compressible In Sir William Gull's case there are no details In the St George's Hospital cases in Case 1 the pulse was 82 when the patient first came under observation, at the end the rate exceeded 100 and remained so; small In Case 2 the pulse was 94 on the only occasion on which the rate was recorded, full In Case 3 the pulse was intermittent, on ten days it was over 100, on one day it was 143 In Case 4 no mention of the condition of the pulse was made

Pulsus paradoxus occurred in Weidenmann's case quoted by Dr Harris, in which the large vessels were embedded in fibrous tissue, in Kussmaul's case, quoted by Dr Harris in which the arch of the aorta, the pulmonary artery, and the superior vena cava were compressed by fibrous tissue, in Kussmaul's second case, quoted by Dr Harris, in which it is stated that "firm and old adhesions of the exterior of the pericardium to the surrounding parts" existed, in F Kipp's case, quoted by Dr Harris, in which "the upper part of the mediastinum presented very little change", in Bauer's case, quoted by Dr Harris, in which no constriction of the large vessels was found, in A Fox's case, quoted by Dr Harris, in which no mention is made of constriction of large vessels, in Hutton's case, quoted by Dr Harris, in which large vessels were compressed, in Dr Harris's case, in which no mention is made of constriction of large vessels, and in Dr Buchanan's case, in which no necropsy took place The pulse rate in all the recorded cases is found to be in excess of what is normal Thus, in those collected by Dr Harris in which the rate is given it is always over 100 beats in the minute In Dr Olliver's case it was 96, in Sir William Gull's and Dr Buchanan's the rate is not mentioned In Dr Blumfeld's case it was 80, in Dr F Taylor's it was from 96 to 104, in Dr Habershon's it was 70, and in Sir Samuel Wilks's it was 100 Of the St George's Hospital cases in all the rate was above normal and in one (Case 3) it reached 143

Pulsus paradoxus occurred in nine only of the cases included in this paper In four of them the fibrous growth included the large vessels, in two cases it is distinctly stated that the large vessels were not so involved; in two cases no mention is made of any such condition, the inference being that the large vessels were free In Dr Buchanan's and Dr Sutherland's cases no necropsy took place This analysis shows that in 50 per cent of the cases in which pulsus paradoxus was observed no constriction of the large vessels by fibrous growth existed—a fact which refutes Kussmaul's theory that pulsus paradoxus is of great diagnostic significance in this particular pathological condition

Kidneys.

Harris's cases	Cases.	*Other cases (continued)*	Cases.
Healthy ..	3	Gull's case healthy ..	1
Large and congested	4	Olliver's case, congested	1
Congested	3	Wilks's case no mention	1
Pale	1	Blumfeld's case, congested (venous) ..	1
No record	14	F Taylor's case small and healthy ..	1
Other cases.		Sutherland's case healthy clinically	1
Buchanan's case, healthy clinically	1		
Habershon's case healthy ..	1		

St George's Hospital cases —In Case 1 the kidneys were natural In Case 2 they were large and congested, weighing 21 ounces the cortex was increased In Case 3 the united weight of the kidneys was nine and a half ounces they were firm and congested In Case 4 a few small cysts were present but otherwise the kidneys were natural.

It is unfortunate that in as many as 14 of the cases collected by Dr Harris no mention is made of the morbid anatomy of the kidneys Of the remaining 22 cases recorded in this paper, in eight the kidneys are distinctly mentioned as having been healthy, in six they were congested but

[9] Quoted by Sir Samuel Wilks in Guy's Hospital Reports vol. xvi, p 201

presumably not otherwise affected, in one case they were pale but no mention is made of organic disease, in one case they were, excepting that a few small cysts were present healthy—that is to say in 13 out of these 22 cases these organs were practically healthy In one case they were large and congested. In one case (Case 3) they were firm and congested In one case (Case 2) the organs weighed 21 ounces, were large and congested, with increase of the cortex From the above analysis it appears that the affection chronic mediastinitis is, in this collection of cases under consideration, not associated with structural disease of the kidneys As a matter of fact structural change in the kidneys is recorded in only one of these cases in which the morbid anatomy is described—viz, in that of Case 2, and even in this instance it is merely stated that the cortex was increased

Urine

Harris's cases.	Cases.	*Other cases (continued)*	Cases
Albumin present ..	3	Wilks's case, not mentioned	1
Albumin absent	7	Buchanan's case, absent	1
Not recorded	15	Sutherland's case, not present at first	1
Other cases		Oliver's case a trace	1
Habershon's case, slight albumin	1	F Taylor's case a trace	1
Gull's case, not mentioned.	1	Blumfeld's case, one-eighth albumin	1

St. George's Hospital cases—In Case 1 the urine occasionally contained a trace of albumin. In Case 2 the urine was of specific gravity 1004 and highly albuminous on admission two months later its specific gravity was 1020 and it was free from albumin. In Case 3 the urine contained a trace of albumin. In Case 4 the urine was of specific gravity 1022, high-coloured, and free from albumin.

Albumin, it appears, is not a constant constituent of the urine but is often present in this affection in greater or less quantity and is dependent upon the state of the circulation rather than upon organic changes in the kidneys The condition of the urine is not recorded in 15 of Dr Harris's cases

Ascites

Harris's cases	Cases	*Other cases (continued)*	Cases.
Ascites and general dropsy..	8	Buchanan's case, no ascites, no dropsy	1
Dropsy ..	10	Oliver's case, no ascites, no dropsy	1
Ascites with slight œdema of legs	1	F Taylor's case, ascites dropsy	1
Ascites with œdema of arms	1	Blumfeld's case, ascites and dropsy	1
No ascites	3	Habershon's case ascites and dropsy	1
No mention	4	Gull's case, not mentioned	1
Other cases		Sutherland's case, ascites ..	1
Wilks's case, abdomen distended	1		

St. George's Hospital cases—In Case 1 there were ascites and some honeycomb perihepatitis. Behind the peritoneum in front of the aorta and inferior vena cava there was a considerable amount of fibrous tissue, involving the semilunar ganglia. In Case 2 there was probably no ascites and no mention is made of any peritoneal changes In Case 3 ascites was present and the peritoneum was injected." In Case 4 there was ascites the peritoneum was opaque and thickened where it was in contact with the abdominal walls there were many diffused areæ of dark colour

The presence or absence of ascites is definitely recorded in only 21 of the total number of cases In 16 of these it was present and in five it was absent, thus showing that this particular complication is present in a very great proportion The ascites was accompanied by chronic thickening of the peritoneum, unconnected with cirrhotic changes in the liver, unless the patient had been addicted during life to the abuse of alcohol as reference to the following table clearly shows It is evident, then, that in the disease known as chronic mediastinitis a chronic inflammation of the peritoneum frequently occurs the cause of which is not at present made out

Liver

Harris's cases.	Cases.	*Other cases (continued)*	Cases
Enlarged, "nutmeg" ..	9	Oliver's case, congested ..	1
Enlarged and congested ...	2	F Taylor's case, compressed, capsule thickened	1
Enlarged	4	Blumfeld's case, nutmeg" and fatty ..	1
Congested.	1	Sutherland's case, much enlarged (clinically) ..	1
Nutmeg not enlarged..	1	*St. George's Hospital cases*	
Rounded in shape, 59 oz. capsule thickened	1	Case 1, enlarged "nutmeg," capsule thickened	1
Not recorded	7	Case 2, enlarged	1
Other cases		Case 3 nutmeg, 49 oz.	1
Wilks's case "nutmeg"	1	Case 4, cirrhosis 72 oz. ...	1
Habershon's case healthy	1		
Gull's case, healthy	1		

In eight of the 36 collected cases no information is forthcoming as to the condition of the liver, and of the remainder enlargement or the nutmeg appearance due to venous obstruction was found in 23, in one case the organ was pale and fatty, in one it was in a state of cirrhosis and considerably heavier than normal (72 ounces), in one it is described as having been rounded in shape, its capsule thickened, and its weight 59 ounces In the case in which cirrhosis existed the condition was the result of the abuse of alcohol The condition of the liver in a large proportion of these cases is attributable to cardiac dilatation or failure, or to inefficiency on the part of the heart generally, as the result of its arrested development

The spleen—In nearly half (15) of the cases details are wanting as to the morbid appearances of the spleen and of the remainder the condition at the necropsy varied In four cases it is stated to have been healthy, in five instances it was enlarged and in one of these it weighed as much as 17 ounces This patient had been a hard drinker and suffered from cirrhosis of the liver In two cases the only recorded lesion is a thickened capsule, in one case the organ was enlarged, soft and friable; in seven cases it was firm and congested, but, so far as the records show, not enlarged

Condition of Pleuræ

Harris's cases.	Cases.	*Other cases*	Cases.
"Fibrinous mediastinitis"..	1	Oliver's case, adhesions to pericardium chest wall and diaphragm	1
Adhesions to chest wall and to pericardium	7	F Taylor's case, adhesions to pericardium and chest wall	1
Adhesions to pericardium	3	Blumfeld's case, adhesions to pericardium and chest wall	1
Adhesions to surrounding parts	2	Sutherland's case left pleurisy and effusion clinically	1
Pleuritis	1	Habershon's case, fluid in both.. ..	1
Adhesions and small amount of fluid	2	Gull's case, right much thickened	1
Cavities obliterated ...	1	Wilks's case (No 5 in the table), no mention	1
Dense fibrous tissue in upper part of mediastinum	1	Buchanan's case, no mention	1
No adhesions ..	1		
Adhesions to pericardium and diaphragm ..	1		
Adhesions to chest wall and mediastinum	1		
Adhesions to pericardium, chest wall, and diaphragm	1		
No mention	3		

St. George's Hospital cases.—In Case 1 the left pleural sac was quite full of fluid there were old adhesions posteriorly especially at the upper part. The right pleural sac contained about a pint of serum in the upper part the lower part of the cavity was obliterated by fibrous adhesions. In Case 2 all the structures in the thorax were matted together by old adhesions. In Case 3 the right pleural cavity contained about a pint of fluid the left pleural cavity contained a little fluid and there were some" old adhesions. In Case 4 there were extremely dense adhesions in the left pleural cavity, especially at the lower part these adhesions constituted a fibrous investment of the lung half an inch in thickness in the vertebral groove.

Of the cases collected in this paper that of Case 1 already mentioned is especially interesting, as showing (1) that very extensive pathological changes may have been in progress probably for many years, involving such important structures as the pleuræ and pericardium without giving rise to any symptoms indicating a departure from good health, and (2) in the absence of any previous disease likely to have given rise to such changes In the present state of our knowledge it is impossible to give any satisfactory explanation of the pathological condition found in this case Equally interesting is Dr Blumfeld's case, in which the disease occurred in an infant at the early age of 15 months In this case the cause of the chronic mediastinal inflammation was presumably due to the caseation of the bronchial glands The history of the cases furnishes no data as to the probable date of the commencement of the mediastinitis, but in Dr Blumfeld's case it seems improbable that connective tissue development so great as to cause thickening of the pericardium to the extent of three-quarters of an inch can have been due to an attack of bronchitis, from which the child suffered four months before death

Diagnosis—The diagnosis of this particular affection is a matter of considerable difficulty often on account of the effusion which occurs in the serous cavities As evidence of this difficulty it may be mentioned that Dr Taylor's case was under his own observation constantly and under that of one of his colleagues for a period of three weeks and that cirrhosis of the liver was at one time thought to be the explanation of the symptoms and physical signs Further, in my own case (Case 1) a consultation of the physicians took place without any definite diagnosis being made Subsequent consideration however, of the case showed that one fact which was observed when the patient was first admitted—viz the fulness of the face and the œdema of the thoracic walls—

was insufficiently appreciated At the same time it may be remarked that the dyspnœa on exertion, the dusky complexion, the cyanosis of the lips, and the general dropsy seemed amply explained by failure of the right side of the heart Moreover, the effusion into the pleural cavities deprived one of the information usually afforded by percussion of the cardiac area and by the determination of the exact position of the heart's impulse Dr F Taylor[10] remarks "that a mediastinitis with adhesions or matting could only be suspected if the upper limbs or face or neck were quite exceptionally or perhaps quite early involved" This statement is, as it seems, borne out by Case 1 recorded in the first part of this paper and by the case under Dr Blumfeld's care already mentioned Puffiness of the face, therefore, cyanosis of the lips, œdema of the thoracic walls occurring as Dr Taylor says exceptionally or quite early, are important points in the diagnosis of the disease, chronic mediastinitis In his clinical lecture on this disease Dr G A Sutherland[11] calls attention to prominence of the veins of the arms and neck, puffiness of the face, and duskiness of the lips, cheek, and tongue, and to the fact that ascites was, as in many of these cases, an early sign of this particular affection

Treatment —From the nature of the disease it is clear that treatment either medical or surgical is of little avail when the pathological condition is fully established It is probably impossible in the earlier stages of the disease to ascertain that the fibrous induration has begun in the structures around the heart and in the mediastinum The remarkable absence in some of the recorded cases of any antecedent illness or of any symptoms of so serious a disease until a comparatively short period before the fatal termination, preclude the possibility of any prophylactic measures Up to that period some of the patients enjoy good health and do not therefore come under the observation of a medical practitioner The condition is, in fact, occasionally entirely without symptoms until indications of cardiac failure occur and it is then irremediable In some instances it has probably commenced in early life and so it emphasises the necessity for special care in the management of the convalescence of children who may be the subjects of acute rheumatism It only too often happens that when the acute stage of rheumatic fever has passed the necessity for prolonged rest is overlooked and the child is allowed to leave its bed and resume its active habits before the affected structures have recovered from the damage done to them before the processes of inflammation, both inside and outside the pericardium, have subsided In either case from want of sufficient rest recovery from these morbid states may be either retarded or prevented, a chronic inflammation may be established the event of which may in some instances be chronic mediastinitis or indurative mediastino-pericarditis

TABLE GIVING PARTICULARS OF 12 CASES OF CHRONIC MEDIASTINITIS IN 10 OF WHICH A NECROPSY WAS MADE

No of case.	Source whence case was obtained.	Age	Sex	Previous history and mode of onset	Duration	Variety
1	St. George's Hospital.	25	F	The only known illness was measles when a child There were no symptoms till 6 weeks before admission into hospital on May 12th, 1896	12 months less 12 days	Mediastino-pericarditis (pericarditis interna and externa).
2	St. George's Hospital.	31	M.	A heavy drinker His health was good up to 6 months before admission	8 months.	Mediastino pericarditis (pericarditis interna and externa).
3	St George's Hospital.	34	M	No illness till influenza in 1892.	6 week	Mediastinitis (pericarditis externa and interna)
4	St George's Hospital	55	M	Formerly a soldier he had never served abroad He was a heavy drinker He had had bronchitis since 1888 and dropsy in 1889 He had never had rheumatism to his knowledge He had had jaundice some time before admission.	7 years	Mediastinitis (pericarditis interna and externa)
5	Sir Samuel Wilks: Guy's Hospital Reports, 1871 Third Series, vol xvi, p. 204	9	M.	Always a sickly lad. He had never had rheumatism He had had scarlet fever 3 years ago. For 6 weeks before admission he suffered from symptoms of heart disease.	6 weeks.	Pericarditis interna.
6	Dr R J Buchanan "A case of early indurative mediastino-pericarditis with pulsus paradoxus," Liverpool Medico-Chirurgical Journal, 1896, vol xvi p. 325.	21	M.	No serious illness till 1892, when he had what was considered to be an attack of influenza he was laid up 2 or 3 weeks There was no definite history of rheumatic fever He was temperate in the use of alcohol.	2 years	Mediastino-pericarditis
7	Dr E. Oliver: New York Medical Journal, Jan. 19th, 1895	50	M	Nothing could be learned of his history He had been a hard drinker up to 3 years ago. Then cough, especially at night came on with thick yellowish expectoration some time after he became short of breath and asthmatic on exertion. About July 1st 1894 his urine became scanty and his appetite bad He gradually became weaker and on August 16th 1894 entered St. Peter's Hospital practically exhausted partly owing to very meagre surroundings.	3 years.	Pericarditis externa and interna
8	Dr F Taylor: THE LANCET Oct 29th, 1898.	42	F	Scarlet fever 4 years before admission into Guy's Hospital 2 months previously to admission an adeno-myxoma was removed from the left breast	11 months	Mediastino-pericarditis (pericarditis externa and interna)
9	—	15 months.	M.	He had had bronchitis 2 months previously to admission He had swelling of the face and legs 2 months previously to admission on Oct. 1st 1896	3 months.	Mediastinitis (pericarditis interna and externa)
10	Sir William Gull: Guy's Hospital Reports, Third series, vol. v 312.	61	M.	He had been ill for 4 months. The symptoms were sharp pain in the right side, there was no cough	4 months.	—
11	Dr Habershon Transactions of the Pathological Society vol xxvii p 79	37	M	He had had variola when young. He was quite well till 7 years before his admission in June, 1874	7 years	Mediastinitis.
12	Dr G A Sutherland THE LANCET Jan. 8th, 1898.	8	M.	He had had pleurisy with effusion 3 years previously and rickets in infancy with bronchitis	Some months.	—

[10] Loc. cit. [11] THE LANCET, Jan. 8th,

REMARKS

CASE 1

Pathological appearances.—Fibrous mediastinitis. There was fluid in both pleuræ, the left was quite full. Old adhesions obliterated the lower part of the right. The edges of the lung were adherent to the right auricle and slightly to the right ventricle. The cavity of the pericardium was obliterated by old adhesions. The pericardium was much thickened, especially anteriorly, the heart was compressed, the walls were pale and soft and were not invaded by fibrous tissue. The valves slightly opaque, were efficient. There was excess of fibrous tissue in the anterior mediastinum causing adhesions to the sternum. There was excess of fibrous tissue in the posterior mediastinum. The œsophagus was adherent to the bronchial glands. The capsule of the liver was thickened, it was in a "nutmeg" condition, flabby, soft and fatty. There was no cirrhosis. The liver was enlarged. Ascites was present, also general anasarca. There was no compression of the large vessels at the base of the heart.

Chief symptoms, physical signs, and cause of death.—There were dyspnœa and cyanosis. No cardiac impulse could be felt and no pulsus paradoxus was noticed. Occasionally there was a trace of albumin in the urine which was otherwise healthy. Hæmoglobin was deficient in the blood. There was Cheyne-Stokes breathing on one occasion (July 11th, 1896). Paracentesis thoracis et abdominis was performed on several occasions and pain was present in the side of the right chest after tapping the abdomen. Several fainting attacks occurred about Dec. 7th 1895. There was no distension of the jugular veins. The pulse was from 82 to 103.

CASE 2

Pathological appearances.—Fibrous mediastinitis. The contents of the thorax were all matted together, the pleural cavities were obliterated. The pericardium was much thickened and its cavity was almost entirely obliterated. The heart was healthy. The lower part of the left lung was solidified (? fibrous induration). There was great increase of fibrous tissue in the mediastina. The liver was enlarged, it weighed 30½ oz. and was gorged with blood. The kidneys were very large (21 oz.) and congested. The cortices were much increased.

Chief symptoms, physical signs, and cause of death.—The patient had jaundice six months before admission. He had been a heavy drinker. The jaundice was soon followed by dropsy and dark-coloured urine. Respiration was deficient at the base of the left lung with dulness. Crepitations were heard over both lungs. The area occupied by the liver was increased. The specific gravity of the urine on admission was 1004, highly albuminous. On Dec. 21st it was free from albumin but was very alkaline and abundant. The specific gravity was 1022. The jaundice increased and the patient became feverish before death.

CASE 3

Pathological appearance.—The costal cartilages were calcified. There was blood-stained fluid in the right pleura. Old adhesions were present on the left side and a little fluid. The lower lobe of the right lung was compressed. There were firm fibrous adhesions all round the base of the heart. The pericardium was adherent to the left lung by old fibrous tissue. The parietal layer was greatly thickened in front of the apex. There was effusion of bloody fluid. There were firm adhesions round both auricles. The heart was small. The visceral layer of pericardium was much thickened. The valves were healthy. Ascites was present. The intestines were congested. The kidneys weighed 4½ oz. conjointly.

Chief symptoms, physical signs, and cause of death.—Dyspnœa was present six weeks before admission. There was swelling of the legs 12 days before admission, also evidence of fluid in the right pleura. The heart's apex could not be found. The pulse was soft and irregular. There was a trace of albumin in the urine. The pulse became intermittent four days after admission. Dropsy and ascites rapidly increased. Death occurred about 10 weeks from the commencement of the symptoms.

CASE 4

Pathological appearance.—There was great dropsy, also some jaundice. There were very dense adhesions in the left pleural cavity so firm that the lung could only be removed by the knife. Fibrous tissue was especially thick in the posterior mediastinum. The cavity of the pericardium was obliterated. Fibrous tissue was very thick over the base of the heart and arch of the aorta. The heart valves were healthy. The right auricle was enclosed by dense fibrous tissue. There was much ascites. The liver weighed 4 lb. 8 oz. There was excess of fibrous tissue throughout the organ. The spleen weighed 17 oz. it was firmly adherent to the liver. There were a few small cysts in the kidneys.

Chief symptoms, physical signs, and cause of death.—The patient was slightly jaundiced. There was much ascites. The superficial veins on the abdomen were dilated. Rhonchi and râles were present in the chest with bronchial expectoration. The heart's first sound was loud, the organ was somewhat enlarged. The liver was more than a hand's breadth below the costal cartilage. The legs were œdematous. The urine was highly coloured, there was a trace of albumin before death. The spleen was enlarged. Paracentesis abdominis was performed 26 times in all. There was evidence of some mediastinal condition causing obstruction to the return of blood by the superior vena cava with dulness of the thorax. Gradually the patient became more water logged.

CASE 5

Pathological appearance.—The pericardium was generally adherent and much thickened, the inflammatory thickening surrounded the roots of the vessels. The pericardium together with the adhesions were as thick as the walls of the heart. The left ventricle was thin and small, the muscle was good. The walls of the right ventricle were infiltrated with fibrous material, as also were the walls of the right auricle. The valves were healthy. The vena cava and veins in the neck were no encroached upon. The liver was of the "nutmeg" kind.

Chief symptoms, physical signs, and cause of death.—There were dyspnœa and cyanosis. There was no bruit. The heart sounds were natural. The pulse was small, usually about 100. The respirations were 36. Dropsy was present.

CASE 6

Pathological appearances.—The result of this case was not recorded.

Chief symptoms, physical signs, and cause of death.—There was general cyanosis. No œdema was present. The temperature was normal, the skin was clammy, and the pupils were dilated. The heart's impulse was exaggerated, rapid, undulating with a marked thrill over the præcordial region. There was no sinking or retraction of the intercostal spaces. Cardiac dulness increased in all directions, especially to the right. There was a systolic murmur over the pulmonary cartilage, also over the aortic cartilage, the second sound was accentuated. There was a presystolic murmur over the fourth left interspace and rib. There was no murmur at the apex. The impulse was in the fifth space, four inches from the mid sternum. There was a loud systolic bruit over the right trapezius, also over the left. The veins of the neck were distended but not altered by respiration. The pulse was irregular and of rather low tension; paradoxus. The lungs were normal. There were dyspepsia and constipation. The liver, spleen, and urinary system were normal.

CASE 7

Pathological appearances.—The pleuræ were greatly thickened, firmly adherent to each other to the chest walls, and to the diaphragm. The lungs were emphysematous and their bases were congested. Fibrous changes were present in the right apex where there were four or five small cavities rather smaller than a hazel nut. The pericardium was firmly attached to the surrounding structures, the two layers were greatly thickened and firmly adherent, the pericardial cavity was thus obliterated. The ventricular walls were fatty and thickened, the right ventricle was full of blood, the left ventricle contained a small clot. There was a small fibrous nodule on one of the aortic valves. There were three small patches of atheroma on the ascending aorta, the coronary arteries were atheromatous. The liver, spleen and kidneys were congested.

Chief symptoms, physical signs, and cause of death.—The patient suffered from great weakness, short breath, cough (which was worse at night), yellow expectoration, and dizziness on rising from a chair or getting out of bed. There was loss of sleep and of appetite. He was constipated. The urine was scanty, the specific gravity was 1015, with urates and a trace of albumin, there were no casts. Speech was sluggish and the patient was stupid. There was some emaciation, the skin was pale, bloodless and slightly dusky. The tongue was slightly coated. The chest was barrel shaped. The epigastric angle was obtuse. The respirations were accelerated, there was marked abdominal breathing, the chest moved up and down with respiration. There was retraction of the intercostal spaces on inspiration over the lower parts on both sides. The apex beat was not seen. There was dulness over the right apex, otherwise hyperresonance over both lungs. Cardiac dulness was slightly increased. The liver and spleen dulness were normal. There were harsh respiration with prolonged expiration over both lungs, there were bronchial breathing over the right apex, sonorous and sibilant rhonchi over the front and back, and fine moist râles occasionally over the right apex. The heart sounds were very feeble, the pulmonary second sound was accentuated, the apex beat was very faint, but was heard in the fifth left space three and a half inches from the mid-sternum. There were no murmurs. The pulse was 96 and the temperature was 95° F. There were dyspnœa, dizziness, attacks of asthma and slight delirium. The patient died on Nov. 21st 1894.

CASE 8

Pathological appearances.—Fibrous mediastinitis. The structures in the thorax were all matted together. Two layers of pericardium were adherent and much thickened. The lungs were compressed and airless except at the apices. The bronchial tubes were dilated at the left base. The bronchial glands were natural. The right auricle was dilated and the right ventricle was dilated and hypertrophied. The left ventricle was small, not hypertrophied. The valves were healthy. There were chronic and recent peritonitis. The liver was compressed and the capsule was thickened. There was a calculus in the gall bladder. The spleen was small and hard, its capsule was thickened. The kidneys were small and healthy.

Chief symptoms, physical signs, and cause of death.—There were swelling of the abdomen, cough, and dyspnœa. The face was swollen, there was œdema over the sacrum, legs, feet, and face. There was dulness over both bases, fremitus was deficient. The vesicular murmur was absent at both bases. The pulse was from 96 to 104, regular, feeble, soft, and compressible. The impulse of the heart could not be seen, it was just felt in the fifth interspace one inch below the nipple and half an inch internal to it. There was no murmur. The abdomen was tense, slightly swollen, with œdema of the skin on the left side. There was dulness on both sides, but no change on alteration of position. The temperature was from 99.4° to 102° F. There was a trace of albumin in the urine. There were gradual increase of dropsy and persistence of physical signs in the chest. The respirations were from 38 to 50. Towards the end rigors occurred and an increase of thoracic dulness, drowsiness, collapse, death.

CASE 9

Pathological appearances.—Fibrous mediastinitis. The pericardium was three-quarters of an inch thick. Fibrous tissue involved the great vessels. The valves were healthy, the ventricles were dilated and hypertrophied (Transactions of the Pathological Society, vol. xlviii. p. 41). The liver was "nutmeg" and fatty. There was venous congestion of the spleen and kidneys. The mediastinal glands were caseous. Ascites was present (*four pints*). There was no evidence of tubercle save in the caseous glands.

Chief symptoms, physical signs, and cause of death.—There were bronchitis and swelling of the face and legs. The temperature was 99° F. the respirations were 20 and the pulse was 80 and regular. Cardiac dulness extended to the upper border of the second intercostal space and beyond the middle line of the sternum. The heart sounds were normal, the chest movements were normal, and the breathing was normal. There was no evidence of ascites for a month and then much. The arms and legs became blue and œdematous. The liver was two and a half inches below the costal arch. The urine was phosphatic, one-eighth albumin.

CASE 10

Pathological appearances.—The cavity of the right pleura was obliterated. There were fibrous induration and thickening around the bronchus implicating the right vagus and pulmonary plexus. The smaller divisions of the bronchi were dilated up to the periphery of the lung. There were grey and iron grey hepatisation of the lung. In the lower lobe was a large sloughing cavity from softening of the indurated

tissue. The pleura was greatly thickened The left lung was healthy The heart and abdominal organs were healthy

Chief symptoms physical signs, and cause of death—The patient was admitted on Jan. 12th, 1859 He was much emaciated and of cachectic aspect The right chest was quite dull and flattened; the infra-clavicular region was depressed No respiratory or bronchial sounds were audible. There were no vocal resonance no vocal fremitus and no hæmoptysis. The left side was resonant There were râles in the large tubes. Expectoration was muco-purulent He died on June 19th, 1859

CASE 11

Pathological appearances—Fibrous mediastinitis With regard to the pericardium there were old adhesions around the great vessels and at the base of the heart. The heart was enlarged There were fibrous changes in its walls one pulmonary valve was absent and here the greatest amount of mediastinal change was found. The left ventricle was hypertrophied and the aorta was atheromatous The anterior jugulars and large veins behind the sternum were dilated. The left superior cava was obliterated (? congenitally) The axillary and subclavian were dilated. There were pneumonia of the lower lobe of the left lung and œdema of the lower lobe of the right. The liver weighed 69 oz. its capsule was thickened the organ was healthy The capsule of the spleen was thickened the kidneys were healthy There was chronic peritonitis with ascites The peritoneum was much thickened.

Chief symptoms physical signs, and cause of death.—The patient had a sudden attack of swelling of the face and neck in 1857 he was unable to work for two years and then did light work till admission in June, 1874 when he had ascites œdema of the arms and lividity of the face and head. On stooping the lips and ears became purple. The heart's action was feeble the sounds were distant, the first was almost inaudible the impulse was scarcely perceptible The area of cardiac dulness increased. The pulse was 70, irregular feeble, and compressible The anterior jugular veins and the veins on the anterior surface of the abdomen were much dilated A large vein passed across the trachea. Ascites was present. The temperature was 98·6° F and the respiration was 20. The urine was scanty highly coloured, of specific gravity 1030 and loaded with urates it was slightly albuminous but free from sugar Syphilis and abuse of alcohol were denied there was no evidence of the former He died on April 10th, 1875.

CASE 12.

Pathological appearances.—There was no post-mortem examination.

Chief symptoms, physical signs and cause of death.—The patient was thin there was puffiness of the eyes; the cheeks, lips and tongue were dusky There was no dropsy on admission, but much ascites. The respirations were short and rapid there was no dyspnœa or cough Expansion of the chest was limited, percussion was impaired. Respiration was harsh posteriorly and in front. Cardiac impulse was imperceptible the area of dulness apparently was not enlarged The sounds were weak and regular there was no evidence of valvular or other organic disease of the heart. The urine was healthy The spleen was probably not enlarged. There was gradual increase of ascites the heart became weaker irregular with dyspnœa. The face was more puffy and cyanosed albumin was present in the urine. The liver was enlarged down wards to the level of the umbilicus. The abdominal wall seems stretched as if from peritonitis" Cough was paroxysmal causing hæmorrhage in the lids and under the conjunctiva and vomiting There was œdema of the chest wall the veins over the upper part of the thorax were dilated. There was pleuritic friction on both sides but no pain; also dulness over the anterior mediastinal region and harsh bronchial breathing The abdomen was tapped 11 times.

Grosvenor-street, W

REMARKS UPON EXPLORATORY OPERATIONS UPON THE STOMACH FOR OBSCURE AND OBSTINATE GASTRIC SYMPTOMS,

ILLUSTRATED BY A CASE OF GASTRORRHAPHY FOR DILATED STOMACH [1]

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IN 1895, when writing the article upon Diseases of the Stomach in my work upon "The Surgery of the Alimentary Canal," I ventured to predict that the time was not far distant when we should think as little of exploring the stomach without and within as we then thought of examining the brain in cases presenting obscure and indefinite cerebral symptoms While it is still not possible to say that that time has yet arrived one can safely assert that considerable advance along such lines has been made in recent years The way has been largely paved by the success which has followed the treatment of gastric ulcer and tumours involving the gastric parietes We know how successfully and with what surgical simplicity an ulcer or tumour may be excised and the wound united by simple suture If in a diseased area, accompanied frequently with grave complications, we can successfully operate upon the stomach, it is only reasonable to suppose that with all our modern precautions and complete equipments we may still more successfully operate upon a comparatively normal region or organ, in other words, that we may cut down upon the stomach incise its walls, explore its cavity and stitch it up again without any fear of producing results which would militate against any such endeavour, even when the investigation proved purely negative Indeed such treatment on the healthy stomach is now frequently resorted to by surgeons and with the best possible results for the ends in view Thus in cases, for instance of intractable stricture of the œsophagus it is found possible to successfully dilate the constriction from below through the stomach when it is impossible to do so from above through the mouth

If, then, we may safely assert that no harm need follow an operation upon the stomach for purely exploratory purposes the question next arises, What are the circumstances connected with any case which might reasonably be benefited by such an investigation? I think I am right in saying—although it is only the expression of the opinion of a surgeon—that very many cases come before the physician in his hospital wards or the practitioner in his private practice which excite little more than a vague suspicion as to the true nature of the gastric symptoms of the patient, indeed the obscurity and indefiniteness of the symptoms in some cases are such as even to defy an approximate approach to a diagnosis Changes are rung upon every stomachic remedy Lavage is practised with a persistency which does credit to the forbearance of the patient, and yet improvement neither follows nor is any better knowledge obtained regarding the true cause of the patient's sufferings I trust I am not drawing too exaggerated a picture of the physician's fruitless efforts But I have heard it said by practitioners that few cases are more trying to their patience and endurance, more obstinate in resisting all remedial measures, than those of the particular class here referred to

No doubt many chronic gastric troubles arise from causes which no operative intervention could possibly remove, but there is equally no doubt that there are many obstinate cases, many more, indeed, than is usually supposed, which could undoubtedly be operated upon with the best results. It is with the hope that these cases may be submitted to surgical treatment that I am endeavouring to hold out the practically safe measures which the surgeon is prepared to adopt in order to assist the practitioner, if not directly by curing his patient, at least in guiding him, it may be, into better and more suitable lines of treatment

I feel that it would be somewhat beyond my sphere to attempt to indicate how many of these obstinate and indefinite gastric disturbances are brought about Many are, of course, of a distinctly organic nature, such as early gastric ulcer (whether of an innocent or malignant character), commencing obstruction at the pylorus &c Conceive what bright prospects are held out for the life of the patient it may be if instead of persisting for months possibly in treatment by medication symptoms dependent upon early gastric carcinoma the case is submitted to exploratory operation I do not wish to express too hopeful an opinion, but in the light of what we know about carcinoma in other parts of the body it is at least reasonable to suppose that early excision of a carcinomatous focus might end in permanent cure As surgeons our experience at present is that hardly a case of gastric carcinoma is brought under our observation till the disease is so far advanced that a tumour can actually be felt through the abdominal parietes I need hardly say that with comparatively few exceptions our operative treatment in this disease resolves itself into measures of a purely palliative character, we may alleviate the more troublesome symptoms, but we cannot effect a cure because our intervention is too late

Then, again, there are classes of cases of a particularly obstinate and obscure character which from the absence of any more definite causes seem to indicate purely functional disturbance They may be neurotic, whatever that may signify, but while they defy all the usual and conventional remedial measures succumb in some mysterious way to an exploratory operation

Dyspepsia, I take it, is in some shape or form the all-embracing symptom of almost every gastric trouble It is therefore significant of so many different complaints both functional and organic, that the tendency is in the absence of any very distinct contra indication to treat every case in the first instance as of the less serious class, and thus in being possibly functional to follow out in consequence some conventional line of treatment in the way of medicine and

[1] A paper read at a meeting of the Glasgow Medico-Chirurgical Society on March 17th, 1899.

diet Doubtless in the vast majority of cases such treatment soon realises the best possible results and the rapidity with which recovery takes place sufficiently indicates the correctness of the diagnosis and the success of the treatment There are few diseases, indeed, even of an organic nature which are not temporarily improved by the simple measures at first employed. In one sense it is unfortunate that it should be so because the deception thus wrought only serves to prolong the time for the pernicious advance of the disease and the delay of those measures which alone could be productive of permanent benefit. It is indeed, difficult to say how long measures of a purely medicinal—or shall I say conservative?—character should be persisted in before operation should be advised. There must be a period, however, when the practitioner feels that his treatment is failing to produce the permanent good effects which he anticipated I can only hope that the harmlessness and simplicity of the exploratory operation which I have briefly endeavoured to indicate will induce him not to persist longer in efforts obviously fruitless, but to be persuaded and to persuade his patient that an operation might serve to explain the persistency of the symptoms if not actually to cure or relieve the complaint

Just as an illustration of what I mean, what can be more useless as regards permanent results and I might add even more harmful than the continuous daily lavage of a stomach which has become more or less permanently dilated, either from some obstructive pyloric disease or from some chronic defect in the digestive function of the organ? I use the expression "more harmful" advisedly, because I believe that whatever good may follow the removal of products likely to remain in the stomach and ferment the amount of fluid constantly thrown in has some deleterious mechanical effect in maintaining—if, indeed, it does not increase—the dilatation But however this may be, a dilated stomach, irrespectively of the removal of the cause which may have produced it and irrespectively of the removal of that cause, will remain a source of persistent pain, discomfort, and dyspepsia with all their attendant ills and possibly subsequent dangers, and until that dilatation is efficiently dealt with no amount of lavage or medication will effect the necessary relief

What, again, I may ask, can be more useless than the endeavour to alleviate symptoms dependent upon adhesions interfering with the normal freedom of movement of the organ? I must not, however, pursue this line of reasoning further But before introducing the case which I trust will illustrate many of the points which I have brought forward I should like to add a few more facts in support of the contention herein set forth

So recently as October of last year (1893) Professor Kocher of Berne one of the most distinguished continental surgeons, pleaded for a more extended use of exploratory incisions in doubtful cases of gastric disease and in words the weight of which it is difficult to over-estimate he says "I have regretted delay in operating often, in operating never Keen of Philadelphia in the Cartwright Lectures, delivered at the beginning of last year (1893) expressed his opinion in similar terms, "in any case,' he says, "in which by other means at his command no positive diagnosis can be reached the surgeon is thoroughly justified in opening and exploring the stomach" I have in "Surgery of the Alimentary Canal" quoted two cases in support of exploratory incisions into the stomach, one by Dr Bradford and the other by Mr Frederick Treves In neither, strangely, was anything definite found and yet the immediate relief obtained in each case was marked In Dr Bradford's case the following operation was performed. An incision was made in the median line from the xiphoid cartilage downwards The stomach was found to be somewhat distended, but without thickening The appearance of the viscus was perfectly normal. Two fingers were inserted into the abdominal wound, the anterior surface was palpated, but no thickening or adhesions were discovered The stomach was pulled from one side to the other so that the whole anterior surface could be palpated without difficulty The lesser cavity of the peritoneum between the stomach and the large intestine was opened a short distance from the border of the former two fingers were inserted beneath the stomach and two fingers of the other hand were placed so as to palpate the anterior surface Between the two the posterior surface of the stomach could be extensively and thoroughly explored and also any thickening ascertained. No adhesions were found on the posterior surface and nothing which was abnormal was observed The stomach was then incised to see if any small ulcerations existed An electric light was inserted and the inside of the stomach was easily seen, neither by this nor by the fingers could anything abnormal be determined The wounds were therefore sewn and dressed with the ordinary aseptic dressing The patient made a good recovery and was relieved of all the symptoms

I think you will acknowledge that this operation was a pretty thorough exploration of the stomach and yet not only did no ill-effects follow the performance of the operation itself, but, on the other hand, its influences seem to have been fraught with the very best results The cause of the patient's sufferings were certainly mysterious, but equally mysterious must be considered the beneficial effects worked by the exploration It is not, however, only in the case of the stomach that we are familiar with the beneficial effects of an operation which so far as could be gathered at the time seemed to have been perfectly negative in its object. The case attributed to Mr Treves was as follows A man, aged 40 years, who was admitted to the London Hospital had been ill, according to his own report, for 12 years with pain in the stomach and vomiting He had vomited blood He was greatly emaciated The pain in the stomach was evidently very severe The stomach was exposed by operation on Oct 11th, 1895 It was much enlarged, but exhibited no abnormal appearance beyond this The stomach was then opened and emptied The pylorus was examined from within and every part of the gastric surface was explored No ulcer or other morbid condition was discovered The gastric and other abdominal wounds were closed The patient seemed well and by January of the next year (1896)—that is to say, about three months after the operation—all pain in the region of his stomach had practically disappeared

In this case, as in that under the care of Dr Bradford, the operation was performed under the impression that the gastric symptoms were due to ulcer The operations negatived any such supposition and although they failed to settle the question of diagnosis they apparently managed to cure or at least relieve the patients

Mr Mayo Robson, acting on lines somewhat similar, has by exploratory laparotomies discovered certain obscure gastric symptoms to be due to adhesions involving some part of the external gastric parietes the separation of which resulted in complete relief The same surgeon, in a paper recently published in THE LANCET,[3] has shown that exploratory gastric operations have been the means of revealing obstruction at the pylorus as the cause of dilated stomach and that the treatment of this obstruction has led to the disappearance of all symptoms of tetany from which the patients had suffered.

Such, then, are some of the facts and opinions which I think tend to support and to encourage the views and practices which I am endeavouring to inculcate And now let me ask your attention for the case which I have to show you this evening My attention was first drawn to the patient by my colleague Dr Ebenezer Duncan, who expressed the difficulty which he had in determining what could be the cause of the patient's persistent gastric trouble The prolonged suffering which he had endured made him readily consent to operation Dr Duncan proposed an exploratory laparotomy, but on hearing my arguments both he and the patient agreed that I should extend my operation to an exploratory gastrotomy if such should be considered advisable at the time of operating Without further comment I will give the report of the case as taken by Dr Charles Fleming and Dr James McHaffie

A man, aged 55 years was admitted to the Victoria Infirmary on Sept 6th 1898, under the care of Dr Ebenezer Duncan He stated that his illness commenced about two years before by more or less pain in his back At the time he thought that he was suffering from lumbago, but the pain soon shifted to the epigastrium where it has remained continuously ever since He described it as a burning, gnawing character located mostly just below the ensiform cartilage Its presence was very constant here though sometimes passing through to the back It was somewhat aggravated by hunger and it was frequently relieved by the ingestion of food He never vomited, but suffered considerably from flatulency The bowels have always been costive, requiring

[2] Vide p. 17[illegible].

[3] THE LANCET, Nov 26th, 1898, p 1352.

aperients To his knowledge he had never passed blood An examination of the abdomen revealed some pain on pressure over the affected area and the stomach gave signs of being considerably dilated, extending an inch below the umbilicus and laterally as far as the left axillary line The heart manifested a marked mitral murmur The other organs appeared to be healthy He had lost flesh considerably, his weight being 9 st 4 lb While in the medical ward he was treated with the usual gastric remedies and his stomach was washed out from day to day As no improvement followed he was removed to the surgical ward On Nov 9th, 1898, he was admitted to Ward 3 under my care with the object of having an exploratory operation performed upon the stomach

The abdomen was opened by a three to four inch incision above the umbilicus and the anterior surface of the stomach together with the pylorus were examined with the finger Nothing of the nature of adhesions or other complications were detected The stomach was then partially withdrawn through the parietal wound and its anterior wall was incised for about an inch in the long axis of the organ and about midway between its two curvatures The pyloric orifice and the interior of the stomach were examined with the index finger, but here also the result was negative No constriction or thickening was felt at the pylorus, the apex of the finger being admitted *easily into the opening* The internal lining of the organ, as far as it could be investigated also appeared to be normal, there was no thickening or ulceration The exploratory incision was then closed by a continuous Lembert suture and steps were taken to lessen the dilated stomach After withdrawing the organ to as great an extent as possible a longitudinal fold in the anterior wall was tucked in and the two curvatures were approximated and secured by a series of interrupted Lembert sutures The stomach was then returned and the abdominal parietal wound was closed by three separate rows of stitches—peritoneal, aponeurotic, and skin The operation lasted 55 minutes

After the operation the patient continued to vomit small quantities of blood stained mucus and he complained of some pain in the epigastrium At about 1 A M the next day he vomited something like eight ounces of pure blood From that time onwards till 10 A M it was computed that he brought up at least 35 ounces of blood His condition when seen by me was such as to indicate free hæmorrhage into the stomach from the gastric wound and the necessity of immediate removal of the patient to the theatre An anæsthetic was administered and the exploratory incision into the stomach was at once exposed by the removal of all stitches It was then found that some small veins were bleeding at the margin of the incision These were secured, the edges of the mucous membrane were stitched together, and a continuous Lembert suture was applied to the peritoneal coat The gastric plication was re-sutured and the abdominal wound was re closed The median cephalic vein was now opened and three pints of hot normal saline solution were injected The pulse and respiration at once commenced to improve Finally, the patient s stomach was freely washed out, much blood clot being thus removed From this period onward uninterrupted improvement took place and he left the infirmary about two months later for the convalescent home at Largs On Feb 10th, 1899, he came to the infirmary to report himself He had put on flesh, was feeling strong, was quite free from his old pain, and was taking his food well When last seen on March 15th the improvement had still continued and his weight then reached 11 st 4 lb against 9 st 4 lb when he left the infirmary

In reviewing the case and its treatment it will be observed that the operation verified the diagnosis of a dilated stomach and, further, that it proved the absence of any gross lesion which could explain the dilatation This latter information paved the way for the treatment adopted The case was then taken as one dependent for its symptoms mostly upon an unduly enlarged stomach, the lessening of the cavity of which might afford the relief required Accordingly gastrorrhaphy was performed A considerable fold of the anterior wall of the stomach was tucked in and secured by stitches The untoward result which immediately followed of excessive hæmorrhage into the stomach from the gastric wound must be looked upon as a very unusual and unfortunate but perfectly preventable accident in the performance of the operation Rather let it be taken as showing how much can be done upon the stomach without any ultimate ill result, for this patient practically underwent two consecutive operations upon the same region

It would unduly lengthen my remarks did I attempt to dilate upon the particular operation performed in this case I have introduced it simply as a basis for the larger and wider discussion of gastric exploration The diagnosis and treatment of unobstructive dilatation of the stomach by operation is merely one aspect of the question and that neither the most important nor, it might be added, the most commendable, because although several successful cases have been reported sufficient time does not yet appear to have elapsed to ensure that the relief at first obtained has proved lasting With regard to the case shown this evening I can only say that the man has been greatly relieved from his original trouble, he has lost his old continuous pain, he enjoys his food when taken with proper precautions, and he has gained greatly in weight and strength Whether this general improvement will be lasting it is impossible to say, but I think that it may be fairly concluded that but for the exploratory gastrotomy there is little reason to believe that the apparently true cause of his trouble could have been determined or the proper treatment employed

Glasgow

EXPERIMENTS WITH PANE'S ANTI-PNEUMOCOCCIC SERUM

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AN anti pneumococcic serum was first prepared on a large scale by one of us in February, 1897 [1] This serum was obtained by injecting a pony with increasing doses of cultivations of the pneumococcus The potency of the serum was tested by mixing varying quantities with a ten fold fatal dose of a living cultivation of the pneumococcus and injecting the mixture into the peritoneal cavity of a rabbit It was found that 0 03 cubic centimetre of the serum was the smallest quantity which, when tested in this way, protected the animal from death Animals which had already been infected could be cured by injecting larger quantities of the serum, provided the treatment was adopted not later than in the first quarter of the disease The serum was thus shown to possess a distinct therapeutic action

Two cases of pneumonia which were successfully treated with the serum were recorded in the above-mentioned paper and others have been reported in the journals A full account of the action of the serum and of the method of standardising it appeared in a later paper by us conjointly [2] The pony after a time, in spite of further injections, ceased to yield a potent serum, so that we were unable to make further trials of its efficacy in the treatment of pneumonia

On March 14th, 1897, Dr Pane brought forward a communication upon Anti pneumococcic Serum before the Medico-Chirurgical Academy of Naples, which was also published in the *Centralblatt für Bakteriologie* of May 27th, 1897 In this communication he gave an account of sera which he had obtained by immunising a cow and a donkey and which he had used in the treatment of pneumonia Since then he has continued his researches and is now supplying the serum in large quantities The present serum is obtained from donkeys and is of two qualities, No 1 and No 2. Of these No 1 is stated to be of such a strength that one cubic centimetre neutralises in the rabbit 1000 fatal doses of the pneumococcus, while No 2 neutralises 3000 fatal doses

Through the kindness of Dr T J Maclagan we obtained a sample of No 2 serum which we have tested in order to ascertain whether it would exert the same protective influence upon our cultivations of the pneumococcus as upon those used by Dr Pane The results of our experiments are here recorded

The method of mixing the serum with the cultivation and injecting the mixture into the peritoneal cavity of a rabbit

[1] Washbourn Brit. Med. Jour Feb. 27th, 1897

[2] Further Researches upon the Pneumococcus, Journal of Pathology, January 1898.

was found to be unreliable on account of the addition of an antiseptic to the serum for preservative purposes The antiseptic used is 0 25 per cent of trikresol which when mixed with a living cultivation of the pneumococcus is sufficient to destroy its virulence as is shown in Table I We therefore employed the method of injecting the serum into the circulation and immediately afterwards inoculating the cultivation into the peritoneal cavity thereby excluding the direct action of the antiseptic upon the cultivation

TABLE I

Rabbit No.	Dose of pneumococcus.	Dose of serum.	Method of inoculation.	Result.
1	0·00001 loop*	—	Intra peritoneally	Died in 36 hours from pneumococcic septicæmia.
2	0·001 "	1 c.c. serum.	do.	Living
3	0·001 "	1 c.c. trikresol (0·25 % solution).	do.	Living.

* Of a blood agar cultivation.

In Table II. are recorded preliminary experiments to ascertain whether the serum exercised any protective action against our cultivation of the pneumococcus

TABLE II.

Rabbit No.	Dose of pneumococcus.	Dose of serum.	Result.
4	0·00001 loop* intra peritoneally	—	Died in 36 hours from pneumococcic septicæmia.
5	0·00001 loop* intra peritoneally	—	Died in 2- hours from pneumococcic septicæmia.
6	0·001 loop* intra-peritoneally	2 c.c. intravenous	Living.

* Of a blood agar cultivation.

In Table III are recorded experiments to ascertain what multiple of the minimal fatal dose of cultivation one cubic centimetre of the serum would protect against

TABLE III.

Rabbit No.	Dose of pneumococcus.	Dose of serum.	Result
7	0·00001 loop* intra peritoneally	—	Died in seven days. Post mortem there were abscess peritonitis and pericarditis. From the blood a few colonies were cultivated, although none could be detected microscopically
8	0·00001 loop* intra peritoneally	—	Died in 30 hours Post mortem blood was crowded with pneumococci.
9	0·001 loop* intra peritoneally	—	Died in 30 hours Post mortem the blood was crowded with pneumococci.
10	0·001 loop* intra peritoneally	1 c.c. intravenously	Living.
11	0·001 loop* intra peritoneally	1 c.c. intravenously	Living
12	0·01 loop* intra-peritoneally	1 c.c. intravenously	Living
13	0·1 loop* intra-peritoneally	1 c.c. intravenously	Died in 60 hours from pneumococcic septicæmia.

* Of a blood agar cultivation.

Inasmuch as rabbit No 7 inoculated with 0 000001 of a loop, did not die until seven days after inoculation we consider 0·00001 of a loop as the minimal fatal dose Consequently one cubic centimetre of the serum protects against at least 1000 fatal doses of our pneumococcus and more might be claimed for it According to Dr Pane it protects against 3000 fatal doses of his pneumococcus, so that his results and ours practically coincide

These experiments are of special interest in showing that the serum will protect against pneumococci obtained from two different sources We hope shortly to publish further observations in this direction From our previous experience of anti pneumococcic serum and from the cases published by Dr Pane we feel justified in anticipating that further successes will be obtained in the treatment of pneumonia and other pneumococcal affections in the human subject with this serum

The Bacteriological Laboratory Guy's Hospital.

ICE OR HEAT AS A LOCAL APPLICATION?

REMARKS ON ICE-MASSAGE IN PAINFUL CASES OF RHEUMATOID AND ALLIED FORMS OF ARTHRITIS AND ON THE LOCAL APPLICATION OF COLD IN SOME OTHER AFFECTIONS

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FEW of our therapeutical inconsistencies are more surprising than our employment of the opposite extremes of temperature for similar conditions For the relief of painful affections both fomentations and ice have been advocated and in the treatment of acute chest affections the ice bag has entered into keen competition with the poultice and, it is claimed with greater efficacy The practical question may often be answered by the patient but it would be well if from our side some estimate could be arrived at concerning the mode of action and the relative value of cold and of hot applications. This question is opportune in connexion with the recent methods of treatment by superheated air, and in painful forms of arthritis, such as those observed in the following cases we have favourable material for study since in them we obtain in addition to the patient's statement as to pain direct evidence from any changes brought about by treatment in the appearance and mobility of the joints Ice-massage or gently rubbing the exposed surface with a smooth block of ice for a few minutes resembles Arnott's method (1851-64) by the direct application of ice rather than Esmarch's method (1860) by a continuous application of ice bags. This device suggested itself to me whilst I was still unacquainted with the work of these observers as a possible mode of relief in a case of acutely painful rheumatoid arthritis of the hip in which the ordinary treatment by medicines by warmth and by the hot air bath had been tried without success and in which finally the application of hot sand bags seemed to aggravate rather than to relieve the affection.

CASE 1 *Painful rheumatoid arthritis of the left hip*[1]—The patient, a man aged 33 years[2] was pale and sallow but was fairly well nourished His father was rheumatic and his mother suffered from painful Heberden's nodules and "rheumatic gout." The patient was previously healthy, although he had indulged in beer rather freely He had been operated upon for glands in the neck in July, 1897 There was no history of rheumatic fever, but two or three weeks previously to the onset of the hip pain there had been some painful swelling of the wrists He had not suffered from syphilis and there had been no gonorrhœa until September 1893 when a small preputial sore and very slight discharge were observed for a day or two The present symptoms had begun in December 1897, with gradually increasing pain and impairment of movement in the left hip and had been much worse since August, 1898. Work had to be given up entirely some weeks before he was seen at the hospital and he was admitted with a diagnosis of sciatica on Nov 19th, 1898 and since that time had remained in bed not improving but deteriorating under treatment both as regards pain, fixation, and wasting of the limb Prior to his

[1] This case was exhibited before the Chelsea Clinical Society on Feb. 21st 1899.

[2] St. George's Hospital Medical Register 1890, No 1563.

admission the worst pain had shifted after the use of hot baths from the front to the back of the hip and thigh The diagnosis of sciatica was duly considered and laid aside as was also that of gonorrhœal arthritis There had been a slight urethral discharge since September but not any previously and none could be detected on local examination, only now and then a slight moisture Nevertheless, as the left testicle though not swollen became painful on Dec 6th, systematic treatment by oil of sandal wood and by intra urethral injections was adopted and was continued without any improvement for some days Active treatment was adopted in the shape of purgatives, daily hot air bath, iodide of potassium, salicylate of sodium, sulphur, and guaiacum in full doses, together with quinine, and morphia was given at night Hot-water cushions were placed under the affected hip The patient was not relieved, the pain and fixation got worse He had been able to walk with difficulty into the hospital, he was now unable to bear the slightest movement in bed without crying out The temperature had remained normal until tonsillitis set in on Dec 10th, and it then oscillated for three weeks between 99° and 101° F until the ice treatment was applied The patient lay helpless, the thigh was strongly adducted, the knee (which was also the seat of much pain and fixation without swelling) was slightly flexed, and the foot was inverted Any attempt at altering the position gave intense pain The parts about the hip and particularly the neighbourhood of the tuberosity of the ischium, were intensely tender, but Mr Warrington Haward found under ether that there was no ankylosis and only moderate thickening of the joint Inhalations of carbonic acid only gave temporary relief to the pain The hot-air baths had been given up as ineffectual Dry heat was now applied in the shape of hot sand bags, but the application gave only very temporary comfort which was followed by worse pain This circumstance suggested to me the use of ice The treatment consisted in gently rubbing the hip and gluteal region and the painful knee with a small block of ice held firmly in the hand with flannel The relief was immediate The patient gratefully acknowledged the cessation of pain, his features relaxed, and during the operation he began to smile The rubbing produced considerable local coldness as felt by the hand and a feeling to the patient of cold and numbness with freedom from pain There was decided improvement in the general condition during that day and night When seen again four days later the improvement was still perceptible and a fresh application was made with the same result On Dec 15th, there being no doubt as to its efficacy, the treatment was ordered to be applied twice daily. After a few days the patient volunteered to carry it out himself and this he continued to do twice a day, and later once a day, with decided advantage until the pain had entirely left him and stiffness only remained

It is noteworthy that not only was the pain removed but the stiffness was also markedly relieved by the first and by all subsequent applications After its prolonged fixation the limb is still lame and not yet able to support the entire weight of the body, and the patient is now undergoing the ordinary treatment by massage and by electricity

The sensations produced by the application of ice were described by this patient as a feeling of local numbness and cold lasting three-quarters of an hour (and for gradually shorter periods as he improved), followed by an internal glow resembling the pleasant warmth felt from sitting in front of a bright fire This glow he describes as reviving the feeling within the joint and destroying the pain, and as entirely differing in character from the hot pain with dragging feeling which constituted his special suffering Two days before the ice was first applied redness, stiffness, and swelling of the knuckles of both hands were complained of These also disappeared and did not return

CASE 2 *First acute attack of rheumatoid arthritis* —A woman, aged 29 years, recently married, was admitted into St George's Hospital on Nov 13th, 1898, suffering from acute rheumatism with delirium and modera[illegible] pyrexia She was fairly strong and of healt[illegible] with a family record free from con[illegible] She had resided in Gloucestershire till [illegible] age, subsequently at Christchurch ([illegible] in Hampshire) and lastly at Fulha[illegible] had been regular, she had never had [illegible] none was found on examination She h[illegible] a fortnight with pain and swelling in the right instep and in the left knee and some pain and stiffness in the left shoulder There had been slight diarrhœa before the onset On admission she was pale, tremulous heavy-looking, and wandering in her talk Her tongue was slightly furred, her pulse was 104 and healthy, and her respirations were 20 The apex beat was forcible but normal in position, there was a slight systolic murmur at the apex The urine was smoky, of specific gravity 1025, and precipitating a [illegible] quantity of albumin, this disappeared after a few days She [illegible] ordered an alkaline salicylate mixture, but this was [illegible] only say ordered for a simple alkaline mixture under the [illegible] his food without the delirium might have been induced [illegible] treatment taken before admission [illegible] soon [illegible] delirium continued, and this being clearly [illegible] the salicylate was ordered again [illegible] temperature continued to oscillate between [illegible] though the delirium ceased after [illegible] and swelling did not yield, although [illegible] rotomy there [illegible] Dec 22nd The patient being [illegible] port wine was ordered [illegible] the knee and the inter[illegible] and the application of [illegible] [illegible] relief At the [illegible] self and the relief of the pain [illegible] provided with an [illegible] to be kept [illegible] free from pain [illegible] and the [illegible] [illegible] more [illegible] adopted [illegible] first prepared on [illegible] This serum [illegible] increasing doses [illegible] potency of [illegible] [illegible] tities with a temperature [illegible] pneumococci [illegible] Hospital on Feb [illegible] cavity of [illegible] metre of the [illegible] tested in this [illegible] which had [illegible] ting larger [illegible] was adopted [illegible] The serum [illegible] treated [illegible] paper [illegible] two or three days [illegible] full [illegible] developed on both arms, and [illegible] of [illegible] admission a large blister appeared above both [illegible] and smaller blisters in other situations Her mouth [illegible] also been very sore No organisms were found in the [illegible] vesicles and from the older ones only pure cultures [illegible] streptococci and diplococci were obtained, but no characteristic micro-organisms This suggested a septic origin for the eruption, perhaps connected with the sore produced by the plaster The joints of the fingers, which were red and swollen on admission, became worse and more painful although the general condition, thanks to narcotics at night and to supporting treatment and arsenic, rapidly improved The thoracic and abdominal viscera were found to be normal The general surface was treated with sweet oil and the excoriated portions with a mixture of boracic ointment and carbolised oil. On Feb 12th, finding the hands intensely tender and rigidly fixed by pain with redness of the knuckles I applied ice massage to them with immediate relief, the patient being at once able to move the wrist and fingers slightly as well as to bear considerable passive movement The improvement lasted for many hours and she had a better night The ice massage was ordered to be applied when required, but it was not needed for some time On Feb 14th pericardial friction developed with precordial pain, this gradually passed off without any effusion [illegible] On Feb 16th the right ankle and knee were [illegible] inful and very tender, with patchy redness of the [illegible] pain and stiffness were relieved by the same [illegible] eanwhi[illegible] derable excoriation had taken [illegible] thigh where blebs had formed [illegible] here was again tenderness of [illegible] warm moist fomenta- [illegible] had failed to relieve [illegible] pain immediately as

before and the relief was permanent The patient's general condition continued to improve and there was no return of the articular symptoms

Remarks—These cases all agree in two respects, the relief afforded to the pain was immediate, and it lasted each time for a considerable period. This circumstance is a recommendation for the method of ice-massage as distinct from the continuous application of the ice bag The experience which may be gathered from the literature on the subject shows that other cases would be likely to benefit and that great relief might be afforded to the severe articular pain of acute rheumatism—although the rapid subsidence of the pain and swelling now obtained under salicylates renders local treatment almost superfluous—and to various forms of neuralgia

The value of cold as a means of subduing pain and checking inflammation has long been known, but its popularity as a therapeutic agent seems to have fluctuated Among its most strenuous advocates within modern times have been James Arnott and Professor Esmarch A summary of Arnott's views will be found in his "Contributions to Practical Medicine and Surgery" (London, 1864) Professor Esmarch's work on "The Use of Cold in Surgery"[6] should be consulted by those interested in the subject The latter part of his treatise is devoted to the surgical aspects of treatment by cold, in which he expresses strong belief. He gives illustrations of various shapes of the ice bag for the [illegible] &c, but he had also found good results from its application to acute rheumatic joints and to the pericardium He gives the notes of three cases of acute rheumatism treated in that way Arnott was not content with ice [illegible] produced congelation of the surface by a freezing mixture of two parts of ice and one of salt and he found application, the duration of which was rarely more than sometimes less than five minutes, to be an unfailing [illegible] of arresting the pain of sciatica, of neuralgia, and lumbago He does not appear to have treated cases of rheumatoid arthritis but he had tried it in chronic rheumatism with rather less striking results "An anæsthetic temperature will not always be so speedily curative as the instances of lumbago which have been related" In lumbago he seems to have obtained immediate and permanent improvement analogous to that which he has noticed in the neuralgic cases The complications which must have occasionally resulted from the local congelation sufficiently explain the neglect which has overtaken the method Ice-massage is a much milder proceeding free from danger, and it would seem equally efficacious It is interesting to note that Arnott's method has recently been revived for the cure of some laryngeal affections Abrams reports in the *Therapeutic Gazette*[7] the immediate cure of functional aphonia by freezing the skin with the methyl chloride spray over the spot where the superior laryngeal nerve sends its internal branch into the larynx. In some cases he has had to repeat the process In other neuroses of the larynx, such as laryngismus stridulus spastic aphonia, and the laryngeal crises of tabes, he has found it of value He also refers to its efficacy in neuralgia and in peripheral neuritis and to the linear applications of extreme cold practised in France under the name of *stypage* for the relief of neuralgia

Since writing the preceding lines I have had experience of the value of ice massage as a means of relieving the severe pleuritic pain which commonly accompanies acute pneumonia of the base The results were encouraging In the two patients treated the relief of the pain was immediate and the application was welcomed as a comfort. The relief in one of the cases lasted for several hours, but it was not permanent This suggests that the frequency of applications might be arranged to suit each case

Although dealing with the local effects of cold this communication would not be complete without a reference to another mode of application successfully employed by Dr Beverley Oliver Kinnear of New York[8] Dr Kinnear has recorded remarkable results from the systematic use of the spinal ice bag in chronic rheumatism and in lumbago both chronic and acute, and he has found the same method of great benefit in various other affections

Curzon street, W

[5] James Arnott wrote essays on The Local Application of the Benumbing or Congealing Temperatures in Inflammatory Painful, and Malignant Diseases (London, 1852) on "Neuralgic, Rheumatic and other Painful Affections with Notices of Improved Modes of Treatment" (London, 1851) on The Painless Extirpation of Cancerous Growths by Congelation and Caustic, including Report on the Recent Use of Prolonged Congelation in the Cancer Wards of the Middlesex Hospital" and on The Internal Application of Very Low Temperature in Asiatic Cholera."

[6] New Sydenham Society's Translation, vol. xl., 1861.

[7] Of. Medical Press and Circular Feb 15th, 1899, p. 171.

[8] Cf. Chronic Articular Rheumatism and Lumbago treated by Cold over the Spine," Medical News August 20th, 1898.

[1] Brit. Med. Jour Sept. 17th, 1898.

A CASE OF EXTRA-UTERINE GESTATION CLOSELY RESEMBLING UTERINE PREGNANCY, OPERATION FOUR MONTHS AFTER TERM, RECOVERY

BY E. BROMET, M A CANTAB, M R C S ENG, L R C P LOND,
SURGEON TO THE REIGATE AND REDHILL COTTAGE HOSPITAL.

A MARRIED woman, aged 38 years, consulted me in March, 1898, believing herself to be pregnant She gave the following history She had been married for 12 years and had one child only who was then aged 11 years Since the birth of this child her menstrual periods had always been regular at every four weeks In November, 1897, the catamenia took place as usual but since that date she had seen nothing On vaginal examination a central pyriform swelling could be made out extending a short distance above the pubes and apparently moving with the cervix when manipulated bimanually In addition the early symptoms of pregnancy were manifest This examination left little doubt in my mind that she was pregnant and I promised to attend her in her confinement in the following August. All went well until the latter part of July, 1898 when she consulted me for paroxysmal pains in the lower half of the abdomen which at times were very severe There had been complete amenorrhœa since her last menstrual period in November, 1897 and no history of the escape of decidual membrane or blood could be obtained On vaginal examination the os uteri, which was lying in the posterior segment, was found to be soft and patulous and to move with the abdominal tumour which now extended well above the umbilicus, in other words, the uterus could not be defined apart from this central abdominal tumour During the ensuing fortnight (i.e, at about the middle of August) pains suddenly commenced in the back, the paroxysmal abdominal pains being still in evidence though less intense, and in addition there was a blood stained discharge from the vagina resembling "the show" Believing that her confinement was about to take place she sent for me and for the nurse On examination the os uteri was dilated so as to admit the tip of the index finger, and on pressing down the abdominal swelling with the disengaged hand a hard mass which I took to be the fœtal head could be felt by the examining finger Fœtal heart-sounds were audible, the breasts were enlarged and typical, and milk could be squeezed from the nipples This spurious labour lasted a few days and then subsided My partner, Mr Berridge saw the patient with me and we decided to await events As time progressed no signs of labour returned, the mammæ became smaller and ceased to secrete milk, the abdominal swelling also subsided to some extent, and the os uteri contracted

As the patient appeared to be "losing ground" I asked Dr J A Mansell Moullin to see her in November with us being in doubt as to whether it was a case of (*a*) extra-uterine gestation, (*b*) pregnancy in a bicorned uterus, or (*c*) so-called "missed labour"—that is, adopting Dr Robert Barnes's definition, "the hypothetical retention of a mature fœtus in the uterus beyond the natural term of gestation, signs of labour at the proper time having been manifested" Dr Galabin in his text-book on Midwifery says that this occurrence is at any rate of extreme rarity and doubts have existed as to whether all cases so described may not have been misinterpreted instances of ectopic fœtation—that is, either extra uterine, tubo-uterine, or in an abnormal uterus Yet there is little doubt from the interesting case reported by Dr Mary Scharlieb[1] that such a condition is possible Dr Scharlieb's case being verified by operation and necropsy We decided to explore the uterus in a short time if meanwhile it had not expelled its contents Accordingly on

Dec 10th I passed a French bougie into the uterus The instrument passed easily for five inches but would not go further As no response was made to this form of treatment I removed the bougie in 48 hours' time I next introduced a laminaria tent, but this procedure was equally futile, as the cervix could not be dilated more than enough to admit the finger, moreover, the impression one got from this examination was not that of a pregnant uterus and, further, that the uterus was apparently distinct from the abdominal tumour The patient was therefore put back to bed, abdominal section being decided upon as soon as she had recovered from the effects of this examination As the patient was determined upon operation in her own home, a small three roomed house, I was obliged to fall in with her request and on the following day I commenced to prepare a room suitable for such a surgical undertaking Dr Moullin, who kindly assisted me at the operation, examined the patient before the anæsthetic was administered and confirmed our view of the case The diagnosis being now placed almost beyond doubt I proceeded to carry out the operation

The patient having been placed under ether by Mr Berridge the peritoneal cavity was opened by an incision about six inches in length extending between the umbilicus and the pubes and the tumour was exposed Numerous adhesions were found between the tumour, the intestines, and the omentum, and whilst manipulating these the tumour or the sac containing the fœtus ruptured anteriorly and about two pints of greenish brown fluid escaped The hand was now introduced into the sac and after some trouble a leg was delivered and the whole fœtus—a well developed female partially decomposed and weighing nine pounds—was removed The placenta, which was attached to the left wall of the sac, was peeled off without difficulty, being very friable and almost bloodless No attempt was made to remove the sac, the mouth of which was stitched to the abdominal wound and a plug of antiseptic gauze was passed into its cavity The convalescence was uneventful

My chief reason for publishing this case is to show the difficulties which may arise in the diagnosis of these cases Here, for instance, with the exception of the paroxysmal pains in the eighth month, there was nothing to cause suspicion that the case was other than a uterine pregnancy, both subjectively and objectively To recapitulate subjectively there were (1) complete amenorrhœa since November, 1897, with absence of pelvic pain, (2) typical changes in the breasts, (3) morning vomiting, and (4) fœtal movements Objectively there were (1) a tumour centrally situated and freely moveable, (2) a cervix lying back "apparently shortened" and flattened, soft and patulous, and dilated at the time at which labour should normally have occurred, associated with pains in the back and "a show", (3) fœtal heart sounds, and (4) a uterus not definable apart from this central abdominal swelling As pointed out by Mr Bland Sutton in his interesting article on Extra uterine Gestation in Allbutt and Playfair's "System of Gynæcology" the subjective symptoms of pregnancy are generally present in these cases of extra uterine gestation It is the objective symptoms or physical signs which constitute the most difficult and misleading features in these cases

Redhill

CHRONIC ŒDEMA OF THE CONJUNCTIVA ASSOCIATED WITH DISEASE OF THE MIDDLE EAR

BY RAYNER D BATTEN M D, B S LOND,
ASSISTANT SURGEON TO THE WESTERN OPHTHALMIC HOSPITAL

THE causal relationship of certain conditions of the eye to diseases of the middle ear is generally difficult of proof The association of the two conditions is, I think, frequent, but it is generally difficult to exclude the accidental concurrence of the two I do not now refer to the inflammatory condition of the conjunctiva and cornea with otorrhœa, in which the cure of the ear trouble relieves the eye trouble, as that is always possib[illegible] abl[illegible] e external infection of the eye [illegible] a deeper relationship causing [illegible] nd orbit which are not due t[illegible] The following case brin[illegible]

A man, aged 35 years, attended at the Western Ophthalmic Hospital with well marked serous œdema of the ocular conjunctiva of the left eye. The conjunctiva was pale, loose, and baggy, slightly overlapping the cornea, and containing a clear fluid This man attended regularly for some months and I tried all forms of external and internal treatment that my ingenuity could suggest. On one occasion I incised the conjunctiva and let out the serous fluid which, however, rapidly collected again when the incision healed At different times I gave salicylate of soda in rather large doses—a drug which I had previously found to be of great service in some cases of bilateral œdema of the conjunctiva I also gave iodide of potassium and various other drugs Treatment, however, appeared to have no effect On a later investigation of his case I found that the patient had had a chronic discharge from his left ear for many years, he was, however not in the habit of taking any notice of it, as it only caused him slight inconvenience On examining his ear it was found to be completely blocked by a very large polypus which had perforated the membrana tympani This was removed and the discharge greatly diminished but still continued, though not now offensive The œdema of the conjunctiva persisted, although somewhat diminished He was then ordered a spirit lotion to be dropped into the ear and promptly the discharge from the ear and the œdema of the conjunctiva disappeared simultaneously without any further treatment to the eye

There appeared to me and to others who saw this case with me no reasonable doubt that the condition of the eye was produced by the disease of the ear and that it was cured by the treatment of the latter The connexion between the two conditions is obscure Dr Sidney Phillips[1] published three cases of œdema of the upper eyelid during scarlet fever In each of his three cases only one eye was affected, in each case there was suppuration in the middle ear of the same side, and in each case the œdema subsided with the relief of the ear condition In one of his cases, however, a small abscess formed in the lid I have on various occasions noted the occurrence of choroiditis associated with chronic disease of the middle ear, also of myopia, with or without choroiditis, on the same side as a chronic ear disease But in these conditions the cure of the ear disease does not remove the results of the disease in the eye and therefore definite proof of the association of the one with the other is not possible and there is always the possibility of a common cause. The form of optic neuritis which occurs in suppurative middle-ear disease appears to be somewhat different from that which is caused by cerebral tumour in that it subsides with the removal of the cause and does not affect the vision

These facts taken together appear to me to be at least suggestive of a causal relationship between disease of the middle ear and diseases of the orbit and eye and must be my excuse for publishing an isolated case

Harley street, W

Clinical Notes

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

NOTE ON THE TREATMENT OF INFLUENZA BY LARGE DOSES OF CARBOLIC ACID

BY ARTHUR WIGLESWORTH, L R C P LOND, M R C S ENG

FOR many years I have been prescribing carbolic acid in cases of influenza in doses of from seven to eight grains every two hours, with rapid relief from all the symptoms, but an accident revealed to me that this dose could be very considerably increased without any danger and with still greater beneficial results to the patient

I saw a patient about five weeks ago who had been seized with the worst attack of influenza which I had ever seen There was not only violent cephalalgia with acute myalgic pains, but there were incessant vomiting and high temperature Her pulse was 130 and she suffered from intense thirst, prostration, and much mental depression She

[1] Brit. Med Jour Jan 26th 1895.

also complained of severe abdominal pain and as she was seven months advanced in pregnancy she feared labour had set in I ordered her a mixture containing two drachms of Calvert's liquid carbolic acid in eight ounces of water, one tablespoonful to be taken every two hours This is equal to six and one-third grains of pure phenol for a dose She commenced to take this medicine at mid day I learned on the next morning that during the night she had poured out a small wineglassful of the mixture and had drunk that instead of a tablespoonful. Careful measurement of the glass which she had used showed that it held just two ounces The patient declared that it was filled but I allowed only three-quarters as having been taken and even this would amount to 19 grains in the dose The patient averred that the only apparent deleterious effect was feeling "a little warm" in the abdomen and that every other symptom had abated The cephalalgia was reduced to a minimum, the myalgia ended in a little soreness of the limbs the abdominal pain had ceased, and the vomiting had abated, and she was sitting up in bed laughing at her mistake I had only to make one more visit when convalescence was established As I had previously considered seven grains of phenol a maximum dose this experience was a revelation to me The next case occurred a few days afterwards I administered 12½ grains every two hours with the same gratifying results and I have done so in each case which I have had since I can now assure my patients most confidently that after the first two doses relief will ensue I desire, therefore, to recommend to my fellow practitioners this method of treatment, especially in the larger doses, feeling assured that they will find the same results to follow its adoption

As I find that much misapprehension exists concerning not only the dose of carbolic acid, but its toxic effects, I have endeavoured to ascertain what dose of carbolic acid has proved fatal but I cannot find any very definite records, as large and varying doses of undiluted crude carbolic acid have been taken I believe there is a record of a teaspoonful having proved fatal, but as to the age of the patient or the attendant circumstances of the case I know nothing In the general records of fatal cases I cannot find anything very definite concerning the therapeutical effects beyond those which accompany the administration of acute irritant poisons generally—viz, pain and nervous prostration—though in some few instances coma has, I believe, supervened As to the effect, however, of the large doses of pure phenol to which I have referred there is neither sickness nor purging and not even nausea In the special case referred to it will be seen that as much as 108 grains were taken in 18 hours and I have under observation at present a case, not of influenza, however, in which I am administering 13½ grains of pure phenol every two hours during the waking hours of the patient and certainly no deleterious effects on the alimentary canal, the kidneys, the heart, or the nervous centres have ensued and this administration has now been going on for three weeks, so that there need be no apprehension of any unpleasant effects being produced by these large doses I think if these facts were generally known carbolic acid would be much more extensively used especially in cases of microbic origin than hitherto has been the case Moreover, when mixed with syrup of orange peel and water—say four drachms of syrup of orange peel and one and a half ounces of water for a 12 grain dose—it is by no means unpalatable and I have not found patients whether old or young, object to it

Liverpool

NOTES OF A CASE OF ANEURYSM OF THE ASCENDING ARCH OF THE AORTA RUPTURING INTO THE PERICARDIUM, NECROPSY

By W GRAY M D EDIN

ABOUT 5 30 P M on March 14th, 1899, I received an urgent message to "attend a railway shunter who had been injured" and immediately responded to the summons The facts of the case are briefly as follows The shunter, who was about 33 years of age and had since entering the service of the railway company nine years ago practically never been off duty through illness was engaged with his mate in the performance of his usual duties His mate left him standing on a wooden box (covering the cranks and apparatus for moving railway points) about six or eight inches above the level of the railway sleepers and it was afterwards ascertained that he had moved the lever to shift the points His mate on returning found him lying on his left side in a trench (which had been dug for a new siding) close by the side of the rails The height from the bottom of the trench to the top of the wooden box was two and a half feet On examination I found a small abrasion on the left cheek and a few scratches in the front of the left ear He was unconscious, breathing very lightly, and no heart's action could be recognised In spite of attempts at resuscitation he died about 5 50 P M on the same day

In my evidence at the inquest I stated that with the exception of the abrasion mentioned I could not say what injuries the deceased had received or what was the cause of death, adding that from the examination which had been made I saw no evidence, apart from the history of the fall, of anything which would cause death An adjournment took place for a post mortem examination which was made in conjunction with Dr F H Morison who acted on behalf of the relatives

At the necropsy the liver, spleen, and kidneys were found to be enlarged There were old pleuritic adhesions over the whole surface of the right lung, also a few old pleuritic adhesions on the left side The pericardial sac was thickened and contained large currant jelly like clots and some blood-stained fluid The heart valves and muscular substance appeared to be normal The ascending arch of the aorta was found to be the seat of a large sacculated aneurysm which had ruptured into the pericardial sac The brain and other organs were normal The jury returned a verdict that deceased died while in the execution of his usual duties from internal hæmorrhage as stated in the medical evidence

Remarks—The case is an excellent example of the great value (one might almost say urgent necessity) of a post-mortem examination where there is reasonable doubt as to the cause of death As the Workmen's Compensation Act applied to this case, and as the relatives threatened an action against the railway company, by practically no other course could justice have been rendered to employers and relatives

West Hartlepool

NOTE ON A CASE OF ASPHYXIA FROM PRESSURE OF AN ABSCESS UNDER THE CHIN WHILST UNDER THE INFLUENCE OF NITROUS OXIDE

By HOWARD H C DENT M B DURH, M R C S ENG, L R C P LOND,

HOUSE SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM

A BOY aged 12 years, was brought to the Queen's Hospital, Birmingham, on March 18th, 1899 with a large swelling containing pus between the chin and the hyoid bone The lad was very ill and was evidently suffering from septic poisoning The lower jaw was almost immoveable, the mouth being slightly open. He had been ill for 10 days but had not complained of difficulty in breathing Gas was administered in the recumbent position and the patient appeared to go under its influence more quickly than is usual and his breathing was not nearly so full as is generally the case The face piece was removed and an incision was made in the middle line over the swelling The incision had only gone through the skin when the respiration became embarrassed and air ceased to enter the chest, although the movements of the thorax continued At the same time there was a spasm of the jaw and slight convulsive movements of the limbs occurred The tongue was with difficulty pulled forwards owing partly to the spasm and partly to the enormous amount of inflammatory thickening about its root Artificial respiration was at once commenced, but no air entered the chest although the tongue was drawn well out of the mouth Tracheotomy was performed and respiration was kept up for one hour air entering freely through the wound, and ether was injected under the skin and directly into the heart but there were no signs of recovery On opening the trachea a small quantity of pus was forced through the wound, and it was thought that the abscess had burst into the windpipe and caused suffocative spasm

At the necropsy an abscess of the size of a small orange was found excavating the body of the tongue and sitting on

the top of the larynx There was some pus in the trachea but no communication with the abscess could be found The other organs were healthy The usual signs of asphyxia were present Death appears to have been due to pressure of the abscess on the glottis, acting either directly or by causing spasm of the sphincter laryngis This pressure would be increased by (1) the recumbent position, (2) the extension of the head necessary to open the abscess, and (3) the pressure of the knife

Birmingham

A MIRROR OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed et Caus Morb*, lib iv Proœmium.

PADDINGTON GREEN CHILDREN'S HOSPITAL

A CASE OF TUBERCULOUS PERICARDITIS, NECROPSY

(Under the care of Dr G A SUTHERLAND)

TUBERCULOUS disease of the pericardium is a by no means infrequent accompaniment of extensive tuberculosis elsewhere and Baginsky has recently shown[1] that in 9 per cent. (six cases out of 66) of a series of cases of pericarditis in children the disease was tuberculous It is, however, in only a very small proportion of these cases of tuberculous pericarditis that the pericarditis gives rise to any important symptoms and in most instances the tuberculous disease is only discovered at the necropsy The great distension of the pericardial cavity which—sometimes at least—occurs in these cases is well shown in the clinical history recorded below A very similar instance in which the amount of fluid present was even greater has been described by Mussey of Philadelphia,[2] for the pericardial cavity contained 64 ounces of blood stained serum

A girl, eight years of age, was admitted into the Paddington Green Children's Hospital on Dec 4th, 1896 No very precise account of her illness could be obtained as she had been living with friends in the country for five months and had returned home on the previous day For six weeks she had been noticed to be "getting ill" and had complained of pains in her chest and tiredness There had been shortness of breath and coughing and on the previous day she had fainted There was a definite history of pulmonary phthisis in the family, her mother's father having died from that affection The patient had always been a delicate child, subject to sore throat, and had suffered from scarlet fever, measles, and whooping cough

The patient was a tall well built, fair child with a somewhat anæmic complexion and looked decidedly ill The temperature was 100° F and rose the same night to 104° There was no eruption or flushing of the skin, but the superficial veins of the thorax and abdomen were distended The breathing was rapid (46 to the minute) and somewhat laboured The left side of the chest moved less than the right and after it in time Percussion of the left side of the chest showed impaired resonance everywhere, there being dulness at the left apex anteriorly and at the back, while from the second rib anteriorly to the costal margin and from one inch to the right of the sternum to the posterior axillary line the note was absolutely dull Over this latter area the breath sounds were scarcely audible and vocal fremitus and vocal resonance were absent. The breathing at the left apex was bronchial and over the back posteriorly it was very harsh vesicular, with some crepitations The right lung was apparently normal In the præcordial region there was distinct bulging from the third to the fifth intercostal spaces and also slight but definite œdema The apex beat could not be localised and epigastric pulsation was present Firm pressure caused pain but no thrill or friction could be determined As already stated, there was a large area of absolute dulness extending from the second rib to the costal margin and from the posterior axillary line to an inch beyond the right border of the sternum The cardiac sounds were very weak and distant both at the base and the apex and were apparently unaccompanied by any murmur The cardiac action was regular and rapid, being from 150 to 170 beats per minute The pulse was running, weak, irregular, and of small volume Examination of the abdomen showed nothing abnormal The urine contained no albumin and there was no œdema of the extremities On the same evening an exploring needle was introduced into the left axilla and some turbid fluid was drawn off. As a result of this fluid continued to ooze from the site of puncture until a dressing of considerable size was soaked with it and a bulging swelling formed in the axilla from the accumulation of fluid in the subcutaneous tissues On again auscultating the heart distinct pericardial friction was heard over and to the right of the lower end of the sternum The conclusion arrived at was that the patient was suffering from non purulent pericardial effusion which had been at least temporarily relieved by the escape of the fluid During the following week there was improvement The temperature showed a diurnal range of from normal or 99° in the morning to 101° or 102° in the evening The œdema of the præcordial region and the distension of the thoracic veins rapidly passed off, while more gradually the cardiac sounds became louder and more superficial and the area of pericardial friction became larger The large area of dulness on the left side of the chest still persisting an exploring needle was introduced but with a negative result

During the following month there was slow improvement in the patient's condition Coughing was at times troublesome and sleep was rather broken, but she complained of no special pain or discomfort The diurnal variations in the temperature continued, but the maximum at night was gradually becoming lower The liver and spleen were enlarging The condition of the left side of the chest showed little change There was loud bronchial breathing at the left apex in front which became very faint and distant below the third rib On the same side over the back the breath sounds were bronchial at the apex and along the spine, but were inaudible elsewhere, being replaced by coarse creaking sounds and rales The enlarged area of præcordial dulness persisted with superficial friction and distant heart sounds There were no evidences of valvular disease, no clubbing of the fingers, and no œdema of the extremities. A month later (Feb 4th) it was noted that the face looked swollen and was of a waxy pallor with a pink flush on the malar regions The temporal and the superficial abdominal veins were swollen and there was slight œdema of the feet and legs The liver extended to an inch below the level of the umbilicus and the spleen to two inches below the costal margin The cough was frequent and harsh The physical signs in the left chest were practically unaltered and it was impossible to map out the cardiac area by auscultation or percussion There was very slight movement of the left side of the chest during respiration, but distinct bulging was present in the præcordial region The patient was transferred to the convalescent home on Feb 27th On March 9th it was noted that the patient had been very well since admission with the exception of persistent coughing at night There was found in the upper part of the left axilla an elongated swelling which consisted of a number of small, hard nodules of about the size of split peas They were not painful or tender, the skin was freely moveable over them, and they appeared to be attached to the deeper tissues The temperature had been normal for some time but now began to show a slight elevation in the evening On March 24th the patient complained of headache and there followed in rapid succession the ordinary signs of tuberculous meningitis She was re admitted to the hospital and died from that affection on April 6th The total duration of the pericardial trouble cannot be definitely stated, but it was four and a half months from the time when the friends noticed any sign of disease to the day of her death

Necropsy—A post-mortem examination was made by Dr Leonard Guthrie on the following day On opening the thorax the pericardium was found to be firmly adherent to the inner surface of the sternum and also to the costal wall in the left axillary region The pericardial sac occupied almost the whole of the left pleural cavity and extended two inches beyond the mid line On opening the pericardium a

[1] Berliner Klinische Wochenschrift Nov 28th, 1893, p. 1053.
[2] Transactions of the College of Medicine, Philadelphia November 1888.

gush of turbid fluid took place The pericardium was much thickened and the inner surface was covered with dense fleshy or fatty looking deposit Masses of this could be detached of the consistence of cream cheese The heart, which lay entirely free, was covered with nodules of various sizes, up to that of a pea, of a tuberculous nature On examining the axillary adhesions it was found that immediately external to them were the hard bodies felt during life in the axilla and that these were similar in composition to the material found in the pericardium It seemed probable that they had passed in a semi solid state from the pericardium along the track of the puncture made when the chest was explored and had become solidified The heart was much enlarged and its substance was pale and soft The valves presented no evidence of inflammation The left lung was not at first visible, but was found to occupy a small space at the apex of the pleural cavity and along the spine It was so adherent and solidified that it could only be removed piecemeal There was no tubercle in either lung the right one being rather small but otherwise normal The bronchial glands were enlarged but not caseous As regards the abdominal organs the special conditions noted were that the mesenteric glands were enlarged and a few of them were caseous, while the spleen contained some small tuberculous nodules The surface of the brain was everywhere intensely congested and along the side of the longitudinal fissure was covered with small tubercles which did not extend further than one inch from the mid line There were no tubercles visible in the Sylvian fissures, but the edges of these and the other sulci felt gritty The membranes at the base were opaque and thickened

Remarks by Dr SUTHERLAND —Tuberculosis of the pericardium may present itself under three different conditions (1) as a part of acute general tuberculosis miliary tubercles may be present in the pericardium (these do not as a rule produce any symptoms during life), (2) as the result of a local extension from a tuberculous focus in the adjoining structures, the lungs, mediastinal glands, &c , and (3) as a form of pericarditis which is probably secondary to a tuberculous deposit in some part of the body, but where the pericarditis is the prominent feature of the illness and the tuberculous disease elsewhere remains latent, often unsuspected Of this somewhat rare condition the above case would appear to be an example. The diagnosis of the exact conditions during life presented some difficulty Pericardial effusion with great dilatation of the pericardium was determined by the exploring needle and subsequent signs, but the state of the left lung could not be clearly made out Pulmonary tuberculosis, dilatation of the bronchial tubes and new growth were passed in review and no one of them could be absolutely excluded As it turned out, the anomalous signs heard over the region of the left lung were associated with the gradual recession of that organ towards the apex and the spine, and the various accompaniments heard on auscultation (coarse and fine rales, creaking sounds) were probably produced within the pericardium By some a very large amount of exudation is regarded as a characteristic sign of tuberculous pericarditis and in the above case it certainly was a striking feature, the pericardium having completely displaced the left lung and encroached seriously on the right The signs of cardiac embarrassment were progressive, but it is worthy of note that the heart lying free in a sort of mud bath of organised lymph and caseous matter was able to struggle on successfully for some months The case terminated fatally from tuberculous meningitis, as has happened not infrequently in other recorded cases, and it would appear most probable that this affection, like the tuberculous pericarditis, had originated in the caseous mesenteric glands

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BRISTOL ROYAL INFIRMARY —The annual meeting of supporters of this institution was held on March 28th under the presidency of Sir Charles Cave The report stated that during 1898 there were 2969 in patients admitted against 3183 in 1897 this decrease being due to the recent structural alterations in the infirmary which temporarily interfered with the full occupation of some of the wards There were also 40 504 out-patients treated against 37,066 in the preceding year The financial statement showed that the total ordinary income for the year amounted to £9913, the total ordinary expenditure being £14 218 The institution has now an accumulated deficit of £8500 The President who has now held the office for more than 20 years was re-elected

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Pulmonary Tuberculosis

WE conclude our report of the meeting of this society held on March 28th, the first part of which was published in THE LANCET of April 1st, Mr BRYANT, the President, was in the chair

Dr THEODORE WILLIAMS and Dr HERBERT HORROCKS communicated a paper on the Treatment of Pulmonary Tuberculosis by Anti tuberculous Serum After reviewing the various investigations into the serotherapy of tuberculosis made in France, Germany, Hungary, Italy, and the United States, by Richet Héricourt, Bouchard, Darmberg, Bernheim, Babes, Maragliano, Paquin, Trudeau, and others, Dr Williams and Dr Horrocks gave an account of their own investigations carried out on nine patients at the Brompton Hospital The antituberculous serum was procured at the Jenner Institute of Preventive Medicine by inoculating a horse (an animal generally considered to be immune to tubercle) with increasing doses of tuberculin, until no reaction followed the maximum dose being 500 cubic centimetres, which was given on two occasions 21 days after the last inoculation one litre of blood was drawn from the left jugular veins, the clot was removed, and the serum was mixed with a weak solution of carbolic acid (for preservative purposes) and transferred to sterilised bottles Afterwards this was injected hypodermically with all antiseptic precautions into the selected patients The cases first chosen were those (1) of acute lung tuberculosis or (2) of chronic lung tuberculosis where acute disease had supervened Five patients were submitted to the treatment, the doses commencing with one cubic centimetre and gradually being increased to 10 cubic centimetres, the object being to bring the system under the influence of the serum as soon as feasible The treatment was carried on for periods of from 15 days to three months, and the number of injections administered was from 15 to 25 The immediate result was rise of temperature and of pulse, slight urticarial or erythematous rashes, and enlargement of the axillary glands The effect on the lungs was increase in the amount of expectoration, diminution in the lung tissue contained therein (except in one case where it increased), diminution of septic organisms in two cases, and disappearance in two cases In one case these were altogether absent With the exception of one case there was no reduction in the number of tubercle bacilli The general condition of the patients deteriorated and one died from a fresh eruption of tubercle and its attendant pleurisy some time after the termination of the injections Two of the patients gained a few pounds in weight but the physical signs at the close of the treatment showed that tuberculisation and excavation had gone on unchecked by the serum injections The urticarial rashes were apparently due to the amount of carbolic acid added to preserve the serum, as on the quantity being reduced these rashes no longer appeared Dr Williams and Dr Horrocks then determined to try (1) serum taken at longer intervals after the horse s inoculation with tuberculin, (2) to employ smaller doses, beginning with one cubic centimetre and never exceeding five cubic centimetres, and (3) to use it in cases of incipient and limited tuberculosis as well as in cases of limited excavation The serum was now taken 72 days after inoculation and was tried in two cases of limited unilateral tuberculosis and also in two of excavation limited to one lung, and the results proved a marked contrast to those of the previous experiments The treatment was carried out for longer periods owing to its being better borne than in the first group and from 32 to 50 injections were given in doses varying from one cubic centimetre to five cubic centimetres The injections in no case gave rise to any local swelling or irritation or rash, either of urticarial or erythematous type, but in all the patients the axillary glands became enlarged during the treatment The temperature sometimes rose after the injections in one case, in the other three cases the records were invariably normal or subnormal The pulse and respiration rate were not materially affected All four patients gained weight the two excavation

cases most, one 12½ lb and one a stone, the tuberculisation cases 5½ lb and 6 lb respectively All increased in strength and vigour and were able to return to their work, except one patient, in whose case a lighter occupation was substituted for a comparatively trying one Cough and expectoration diminished in all and in one case they altogether ceased Physical signs showed limitation of the area of disease in the lungs in the consolidation cases and in the two excavation cases quiescence of the cavity in one and complete contraction in the other With regard to the sputum contents in three cases the tubercle bacilli greatly diminished in number and at times disappeared altogether, but at the close of the treatment there were still some to be detected In one case they did not diminish at all, though the patient improved generally The other organisms—diplococci, staphylococci, and streptococci—disappeared in the two cavity cases, and in the consolidation cases they were noted throughout, though in diminished numbers In one excavation case two injections of streptococcic serum were made with no special effect on the pyrexia or general condition, but it was found that the septic organisms disappeared from the sputum Dr Williams and Dr Horrocks concluded that in order to produce an anti tuberculous serum capable of controlling the evolution of tuberculosis in the human body a considerable interval must elapse between the inoculation and the date of the withdrawal of the serum, for when taken a few weeks after inoculation its effects closely resembled those of Koch's first tuberculin The present trials encouraged a further trial of the milder form of anti tuberculous serum in early cases of lung tuberculosis or where the lesion is limited, but where the disease is overwhelming, as in acute pulmonary tuberculosis or the lung surface is largely invaded by fresh tubercle no advantage is likely to be derived from its use

Dr R L BOWLES said that the observation that weaker forms of serum gave the best results was in accord with his own experience when he used Koch's first tuberculin The reaction was so great in cases in which he had seen the stronger dose used abroad that in his own practice he had employed the weaker form and he thought it acted better In some cases permanent arrest followed, in others the disease continued unchecked

Dr WILLIAMS, in reply, said that he had employed Koch's first tuberculin and had seen great improvement in some cases but his general opinion of it was unfavourable There was not only lighting up of local mischief but in nearly every case breaking down of lung as shown by appearance of lung tissue in the sputum

PATHOLOGICAL SOCIETY OF LONDON

Congenital Cyst of the Tongue —Rheumatic Nodules —Cystic Disease of the Breast — Enlargement of the Pituitary Body —Vacuolated Sarcoma of the Antrum —Biliary Calculus in Children

A MEETING of this society was held on April 4th, the President, Dr PAYNE, being in the chair

Mr RAYMOND JOHNSON showed a specimen of Congenital Cyst of the Base of the Tongue obtained from a male infant, aged four months Dyspnœa had been present since birth and necessitated tracheotomy when the child was four months old, but he died about a week after the operation The cyst occupied the extreme posterior part of the tongue, lying exactly in the middle line and projecting on the surface as a smooth hemispherical swelling about 1 5 centimetre in diameter The postero-inferior surface of the cyst lay in contact with the epiglottis, the latter being so much pushed backwards as nearly to occlude the upper aperture of the larynx The anterior border of the cyst lay immediately behind the circumvallate papillæ and no indication of the presence of a foramen cæcum could be detected In sagittal section the cyst presented an almost semicircular outline, the antero-inferior or deep aspect being flattened Its inner surface was smooth and presented in its deepest part a small depression, the orifice of a short canal in the substance of the tongue The contents of the cyst after hardening in spirit consisted apparently of coagulated mucus Examined microscopically the cyst was found to be lined with a layer, in most parts several cells thick, of flattened epithelium Outside this was a thin fibrous cyst-wall which in the deep aspect of the cyst was in direct continuity with the muscular substance of the tongue and the large acinous glands embedded in it The origin of congenital cysts in the posterior part of the tongue was discussed, the view usually held being that such cysts had their origin in the lingual duct or some of its glandular appendages Dr Martin Schmidt of Strasburg had carefully examined a considerable number of tongues in which cystic formations were present in the posterior part and had come to the conclusion that such cysts, which were often lined with ciliated epithelium, were derived from glandular appendages of the lingual duct rather than from the duct itself In Mr Johnson's specimen, however, seeing that the cyst was exactly mesial in position, that there was no evidence of its having been formed by the confluence of smaller cysts, and that it was lined with flattened epithelium, it was thought probable that the cyst had arisen as a dilatation of the lingual duct itself —Mr SHATTOCK said that he thought that the only reason why many of these cysts were put down as cysts in connexion with the lingual duct was because they were in the middle line Exactly similar cysts were found in positions such as the stomach and œsophagus where there was no question of their starting in the developmental relic He thought that if it were not for the mesial position of the cyst the present specimen would have been put down as an ordinary mucous cyst

Dr F J POYNTON and Dr G F STILL communicated a paper on the Histology of the Rheumatic Nodule. They pointed out that it was essential in the study of this subject that recent nodules and not those of old standing should be examined, and, moreover that a section passing through the periphery of the nodule might give quite a different appearance from one passing through the centre It was necessary, therefore, to take young nodules and to ensure as far as possible that the section should pass through the centre The difficulties of this procedure were considerable A study of sections taken as far as possible in this way showed that in the centre the nodule consisted of fibrinous material, while nearer the periphery nuclei of round cells appeared and still more peripherally more or less formed fibrous tissue In other words, exactly the same process occurred here as in rheumatic exudation elsewhere The essential element in the rheumatic nodule was a formation of inflammatory fibrinous exudation, not of fibrous tissue It would depend upon the severity and duration of the process whether or not fibrous tissue was formed, its formation was not a necessity Microscopic sections of a rheumatic nodule stained with carbol thionin and compared with sections of the pericardium in acute rheumatic pericarditis and of a valve with acute endocarditis stained in the same way showed that the changes were exactly similar The rapid appearance and disappearance of these nodules in many cases strongly supported the view that in some cases they never passed beyond the stage of a fibrinous exudation The name "fibrous nodules" applied to such nodules was unsatisfactory and it was better to use the term 'subcutaneous" or "rheumatic."—Dr W S COLMAN said that some years ago he had made sections of a rheumatic nodule which was only about three days old and found the same conditions as were described by Dr Poynton and Dr Still There was exudation of fibrin between layers of normal areolar tissue and fat, but the fibrin was not organised In older specimens nothing but fibrous tissue was to be seen —Dr H D ROLLESTON asked how far the explanation of the formation of the nodules would apply to erythema nodosum and whether Dr Still and Dr Poynton regarded this as rheumatic —Dr A E GARROD thought that Dr Poynton and Dr Still had clearly demonstrated the true nature of the nodules He thought that erythema nodosum was of quite a different character to rheumatic nodules Erythema was associated with arthritis, while the nodules were clinically always associated with valvular inflammation —The PRESIDENT agreed as to the fibrinous nature of the exudation in early stages He had examined nodules at a later period and the fibrous tissue of which they were then composed was of a peculiar homogeneous appearance But pathologists were still in the dark as to what was the peculiar irritant which led to the escape of the coagulable material from the vessels Erythema nodosum he looked upon as of a totally different character since it affected the skin itself and not the subcutaneous tissues was accompanied by ecchymoses, and lastly because he did not believe that it had any connexion with acute rheumatism There was often a certain amount of tenderness of the joints and even some mild arthritis with effusion, but the joint symptoms subsided with the disappearance of the erythema and he had never seen typical

acute rheumatism follow —Dr J W WASHBOURN also thought that erythema nodosum was not a rheumatic manifestation He thought that each nodule would be found to contain the virus of acute rheumatism just as the periosteal nodes in typhoid fever had been shown to contain the typhoid bacilli —Dr POYNTON, in reply, said that he had never seen severe arthritis in erythema nodosum The site of rheumatic nodules on parts exposed to friction and injury suggested that these might be factors in their causation Examination for micro-organisms had proved unsuccessful

Mr D ARCY POWER showed a specimen of Cystic Disease of the Breast in a boy aged three years The breast with the surrounding tissue weighed just over an ounce after it had been hardened in formalin and alcohol and measured two and a half inches in length and breadth The skin and nipple were absolutely healthy, the bulk of the swelling lying in the lower half of the organ The section of the breast showed that a thick layer of fat was interposed between the skin and the pectoral fascia The superficial portion of the fat was natural and of the usual consistency, the deeper portion being looser and containing numerous thin walled cysts The largest cyst was multilocular and roughly oval in shape, measuring after hardening one and a half inches in its long diameter and one inch in depth It had a definite but thin wall the deep surface lying upon the pectoral fascia The inner side of the breast was free from cysts, but on the outer side there were many cysts, each with a thin but definite capsule The smaller cysts were less loculated than the larger ones Mr Power considered that the specimen must be looked upon as a cystic lymphangioma occurring in the connective tissues lying between the breast and the pectoral fascia and that it was thus comparable with the congenital cystic tumours found in other parts of the body in children, especially in the neck, where they have long been known as hygromata —In answer to Mr SHATTOCK Mr POWER stated that there was no history pointing to previous mastitis

Mr J LAWRENCE and Mr T W P LAWRENCE exhibited a specimen of Hypertrophied Pituitary Body from a man who died at the age of 52 years Symptoms had been present for six years, the earliest symptom being dimness of sight The field of vision was contracted externally on both sides, and later alterations in speech and gait occurred with progressive weakness of the body generally No signs of acromegaly were present The enlargement affected the anterior lobe of the gland and the corresponding part of the pedicle, and the gland which measured 3 5 by 2 5 centimetres, pressed upon and flattened the optic tracts, optic commissure, and the crura cerebri. Microscopically the tumour consisted of a delicate stroma of fibrous trabeculæ separating large and intercommunicating spaces filled with epithelial cells The cells were polygonal in shape, with large round or oval nuclei and measured on an average 10 micro-millimetres in diameter

Dr H D ROLLESTON showed a specimen of Vacuolated Carcinoma of the Antrum The superior maxilla containing soft growth which had invaded its walls was removed from a man aged 32 years. Symptoms had existed for 15 months Microscopically the growth was indistinctly divided into lobules by delicate connective tissue septa The lobules were made up of a meshwork, often remarkably regular, of delicate trabeculæ enclosing spaces The trabeculæ were composed of round cells without any connective tissue basis The spaces contained material presumably produced by the cells The growth could be seen invading and absorbing the bony walls of the antrum Ziegler had described and figured a tumour like this and referred to one in the lacrymal gland as "cylindroma carcinomatodes". Thoma described with a plate a growth exactly like this under the title "hyaline degeneration of a round cell carcinoma of the mucous membrane of the antrum" It seemed more probable that this spheroidal cell growth arose from glands than from the lining mucosa of the antrum The name "vacuolated carcinoma' was suggested as applicable to this kind of carcinoma —Mr CECIL BEADLES referred to two tumours of similar structure which he had met with. Both arose in the antrum

Dr STILL recorded three cases of Biliary Calculi in Infants aged nine months, eight months and five months respectively There had been no symptoms specially pointing to this affection during life but in one case the child screamed frequently and drew up its legs as if with abdominal pain There was no jaundice The calculi were very small, the largest measured 3 5 millimetres by 2 millimetres, they were dingy black in colour and seemed in the two cases examined to consist of bile pigment with no trace of cholesterin Another case occurred at the Hospital for Sick Children, Great Ormond street, in which at the age of four years there were symptoms of severe biliary colic with jaundice and the boy had had several slighter attacks since, but no gall stones had been seen. In addition to these cases 20 others had been recorded in which gall-stones were found in children up to 14 years of age Of the 23 cases thus collected 10 were in infants who were either stillborn or dead shortly after birth, and no less than 14 of the whole number occurred within the first 10 months of life In the new born cases jaundice was almost always present Biliary calculus must therefore be reckoned amongst the causes of icterus neonatorum of a severe and usually persistent variety, and, like the uric acid concretions of infancy, the passage of small biliary concretions was certainly an occasional cause, perhaps a more frequent one than was suspected, of screaming and drawing up of the legs in infants The special liability to gall stones in intra uterine life and early infancy was probably the result of a tendency to stagnation of bile in the gall bladder at this period, as evidenced by the viscid bile often found in infants; the muscular feebleness and inactivity of the diaphragm in intra uterine life favoured this stagnation —The PRESIDENT agreed that biliary concretions were probably the cause of some cases of colic in infants —Dr GARROD said the calculi corresponded with the deposits of 'bilirubin sand' which occurred in adults in the bile-ducts and asked if the bile-ducts had been examined —Dr STILL, in reply said that neither in his case nor in those which he had collected had anything been found in the bile-ducts

Mr CECIL BEADLES showed a series of specimens from insane patients 1 Hæmorrhage into the Suprarenal Body from a woman who died after three days' illness, the symptoms being those of collapse He had met with the condition in three other cases None of them showed any symptoms which suggested that there was any affection of the suprarenal. 2 Specimens from a case of Addison's Disease, which was very rare in the insane, there having been only four cases out of 27,000 admissions There was typical calcified fibrotic degeneration of the body and some tubercle follicles There was marked bronzing of the skin, but the other symptoms were masked

The following card specimens were exhibited —

Mr CECIL BEADLES (1) Heart from a case of Cerebral Embolism, (2) Sarcoma affecting the Pancreas, Suprarenal Bodies, and Lungs, and (3) Lipoma of the Groin

Mr T W P LAWRENCE Atrophy of the Pancreas in Diabetes

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY

Exhibition of Cases and Specimens

A CLINICAL meeting of this society was held on March 24th, Mr EDWIN LEE, President, being in the chair

Dr CHURTON showed 1 A boy, aged eight years, whose sight had begun to fail on Oct 2nd, 1898 On the 14th he was quite blind, on the 20th the left hand and leg were weak, on the 22nd the patient could not stand, and on the 26th he was admitted into the Leeds Infirmary He was found to be well nourished and very intelligent The patient had anosmia. The pupils were dilated, there was no light reflex, and double optic neuritis was present There was left hemiparesis There was no headache or vomiting The family were susceptible to tuberculous infection There was a supposed tuberculous mass about the chiasma and right crus One grain of iodoform and two grains of extract of gentian were given in a pill every four hours Ordinary diet was given Improvement began in a few days On Dec 2nd he could count his fingers and walk a few steps He could now read and could stand on the left foot singly His grasp was normal 2 A case of Suspected Foreign Body in the Left Bronchus, with skiagram 3 A woman, aged 36 years a sorter of foreign rags, with Splenomegaly in the first stage The spleen was much enlarged. She had ascites, also œdema of the feet. Her health otherwise was fairly good There was no marked

anæmia The patient showed impatience of treatment by rest, &c , commonly observed in these cases

Dr BARBS showed (1) A case of Malignant Disease of the Liver, (2) Obstructive Jaundice with an Abdominal Tumour, (3) Ataxic Paraplegia, and (4) a series of interesting Lantern Slides of Various Clinical Cases under his care

Dr CHADWICK showed (1) Two cases in the First and Second Stage of Pseudo-hypertrophic Paralysis, with photographs from a case at present in the third stage, (2) Tuberculous Disease of the Skin under Treatment with Beiersdorf Salicylic Acid and Creasote Plasters, (3) Lead Paralysis with Increased Knee jerks, (4) Painless Enlargement of the Liver (diagnosis?), (5) Simple Pemphigus (congenital, with absence of the nails), and (6) Malignant Growth

Dr TREVELYAN showed the following cases 1 Hemiatrophy of the Tongue in a lad, aged 15 years Difficulty in articulation which was first noticed two and a half years ago was the most prominent symptom Last June the lad saw that the left side of the tongue was shrunken In the absence of other possible causes the atrophy was looked upon as due to a peripheral neuritis of the hypoglossal nerve The palate and larynx were healthy 2 Myxœdema in a man, aged 50 years who had been under treatment for some years and whose weight had been systematically recorded There were no obvious signs of myxœdema at present, but a couple of months ago the thyroid treatment had been omitted for several weeks when the symptoms began to return and the patient put on a stone in weight 3 Ataxic Paraplegia in a man, aged 32 years There were marked incoördination, exaggerated knee jerks, and ankle clonus, but no pains, no loss of the light reflex, no vesical disturbance, and no impairment of sensation 4 Locomotor Ataxia in a man, aged 44 years, with a previous history of syphilis to contrast with the last case

Dr TREVELYAN and Dr DEWHIRST showed a series of six cases of Cardiac Valvular Disease in children ranging in age from five to 16 years There was a definite history of acute rheumatism in three cases and of doubtful rheumatic pains in a fourth case The cardiac lesion appeared to follow upon scarlet fever in the case of a boy, aged 12 years In a lad, aged 14 years, without previous rheumatism there was a loud systolic murmur of maximum intensity over the pulmonary region, together with a systolic thrill suggesting pulmonary stenosis One child, aged nine years, presenting signs of mitral stenosis developed a loud diastolic murmur while under observation, but without other evidence of aortic disease In only one of the cases were there any marked cardiac symptoms and in three there were hardly any symptoms which could be directly referred to the heart

Mr WEST (Morley) showed two cases of Congenital Paraplegia and Hemiplegia occurring respectively in a brother aged eight years and a sister aged five years There was no evidence of congenital syphilis Birth had been difficult but not instrumental, A considerable degree of microcephaly was present in the girl

Mr E WARD showed two cases of Enucleation of the Prostate In both there had been complete retention of urine Suprapubic cystotomy was performed, the prostate capsule was opened on each side by means of Loewenberg s forceps and each lateral lobe was shelled out with the fore finger Each cavity was packed with iodoform gauze and the whole bladder was filled with gauze to retain the plugs *in situ* In one case the right lobe weighed one ounce and the left rather more than half an ounce In the other case each lobe was quite twice as large as those of the first case, but they were not weighed Both patients were entirely relieved, micturition being easy and natural In one case, a man, aged 56 years, the whole of the urine passed per urethram in 14 days after the operation

Mr LITTLEWOOD showed 1 A case of Gastric Dilatation due to Adhesions about the Outer Portion of the First Part of the Duodenum The patient was a man, aged 27 years For two and a half years he had suffered from a dilated stomach He had great distension after food and troublesome palpitation with difficulty in breathing He had lost two stones in weight He was under treatment for a long time before operation Operation was performed on Nov 5th, 1898 There was no obstruction at the pylorus The pylorus and the first one and a half inches of the duodenum were freely moveable and formed a sharp angle with the other part of the duodenum, caused by the displacement downwards of the distended stomach There were some very firm adhesions crossing the outer portion of the first part of the duodenum, extending from the under surface of the liver and gall bladder to the colon These were divided There were no gall stones in the gall bladder The patient made a good recovery, getting up at the end of three weeks Since the operation he has worked as much as twelve hours a day and has put on two stones in weight and has none of his old discomfort 2. A case of Pyloric Stenosis The patient was a man, aged 48 years For three years he had suffered from pyloric obstruction He had vomited almost daily and lately practically every night, often a "pot" full He had lost one and a half stones in weight during the past 18 months On Jan 5th, 1898, pyloroplasty was performed There were adhesions of the duodenum, to the pylorus, and surrounding structures The pyloric opening was very narrow, the transverse measurement of the mucous lining not measuring half an inch He was fed by nutrient enemata for 16 days A little fluid was given by the mouth on the fifth day, the quantity being increased daily Some solid food was given on the eleventh day He got up at the end of three weeks He has gained one and a half stones since the operation 3 A patient who had had a Calculus Removed from the Common Bile Duct The patient was a man, aged 50 years He had suffered for two years from repeated attacks of biliary colic, coming on once or twice a month A gall stone measuring seven eighths of an inch in its longest diameter and one and five-eighth inches in circumference was removed from the common bile duct Recovery ensued. 4 A case of Splenectomy for Malignant Disease The patient was a woman, aged 26 years The tumour was first noticed in December, 1897 On August 1st, 1898, the spleen was removed The patient made a good recovery and is now apparently quite well 5 Two cases of Contraction of all the Flexor Muscles of the Forearm treated by operation The first patient was a girl, aged eight years She had fracture separation of the lower epiphysis of the humerus (left) When the splint was removed the inter phalangeal joints could not be straightened out and this condition of flexion continued to get worse Operation was performed on Dec 5th, 1898 All the tendons were lengthened an inch A second case occurred in a girl, aged six years, and was treated by the same method 6 A case of Fracture of the Patella treated by Barker's Method The patient, a man, aged 27 years, was operated upon 24 hours after the fracture The fragments were separated about one and a half inches and there was a large effusion of blood in the joint He commenced to walk eight weeks later and now can use the joint as freely and as well as the other 7 A case of Cancer of the Breast of seven years' duration The patient was a woman, aged 79 years She first noticed a lump in the breast seven years ago It had not increased much in size during the last three years It is now ulcerated on the surface and there are some enlarged axillary glands 8 A case of Removal of Half the Tongue, Half the Lower Jaw and several Lymphatic Glands about the Right Side of the Lower Jaw in one Mass for Squamous Epithelioma The patient was a man, aged 51 years He was operated upon on Nov 8th, 1898 He said that he was quite well five weeks before that date At present there is no recurrence 9 A case of Chronic Tuberculous Disease of the Wrist treated by Scraping and Iodoform Injections The patient was a man, aged 35 years, a clerk He had tuberculous disease of the right wrist of 19 years' duration He had been under treatment since Oct 7th, 1898 At that time there were three or four discharging sinuses about the wrist The parts were thoroughly scraped and packed with iodoform Most of the carpal bones were carious and were removed He had had numerous injections of iodoform since that time He can now use the hand and writes with it well

Mr W H BROWN showed 1 Six cases of Osteotomy, one being for Vicious Union following Simple Fracture of the Femur The right foot was turned in and interfered with walking 2 A patient who had been run over Both legs were amputated, the one through the knee joint and the other through the middle of the leg 3 A case of Intestinal Intussusception in a child aged three years Laparotomy was performed The intussusception, which was of the ileo-cæcal variety, was reduced The patient made an excellent recovery 4 A case of Fractured Patella treated with a back splint followed by plaster bandage Firm bony union resulted 5 A case of Compound Depressed Fracture of the Skull The bone was fractured in the left parietal region The skull was trephined and the bone was elevated The

patient was unconscious for some weeks and was then found to be paralysed on the right side Eventually the paralysis of the arm and leg passed off 6 A Plastic Operation to correct deformity following extensive burns in the neck

Dr BRONNER showed (1) a case of Traumatic Symblepharon of both eyelids treated by hot fomentation, (2) three cases of Mastoid Disease after operation, and (3) a case of Nystagmus and Convergent Strabismus treated by advancement of the external recti muscles

Dr S LODGE showed three cases of High Myopia treated by removal of the lens

Mr KNAGGS showed (1) a case of Pyonephrosis treated by Nephrotomy, the patient also had albuminuric retinitis, (2) a case of Removal of the Lens for High Myopia, and (3) a patient who had sustained a severe Compound Fracture of the Left Leg and Fracture of the Right Femur Some of the nerves apparently were implicated in the callus around the femur

Mr V HARTLEY (for Mr NUNNELEY) showed (1) a case of Retinitis with a Series of Charts illustrating the gradual recovery of fields of vision, (2) a case of High Myopia with Extensive Choroiditis and Recent Hæmorrhages in Each Eye, (3) a well marked case of Superficial Central Choroiditis, and (4) three cases of Mules' operation

Mr SECKER WALKER showed (1) a case of Subsiding Optic Neuritis due to plumbism of 12 months' duration, (2) a Congenital Coloboma of the Iris and Choroid up to and including the Fovea affecting both eyes, (3) a Congenital Cyst of the Orbit with Anophthalmos, (4) Congenital Absence of the External Auditory meatus with deformed pinna the patient could hear a watch placed on the mastoid, (5) an advanced case of Retinitis Pigmentosa in a child, aged 10 years, with very contracted fields of vision (there was no history of similar disease in the other members of the family), and (6) an Albino

ROYAL ACADEMY OF MEDICINE IN IRELAND

SECTION OF SURGERY

Diseases of the Foot —Perforating Gastric Ulcer

A MEETING of this section was held on March 3rd, Mr R L SWAN, the President being in the chair

Mr W I DE COURCY WHEELER read a paper on Some Diseases of the Foot Having described the anatomical points bearing upon the subject he detailed five cases of complete excision of the os calcis followed by the most satisfactory results, one case of excision of the os calcis and astragalus with portions of the tibia and fibula, 13 cases of medio tarsal operation, or Chopart's operation, all showing favourable results, also three cases of complete excision of the astragalus for disease, besides others for compound dislocation There was a brief record of 39 cases after Syme's operation, also results after Tripier s operation, which Mr Wheeler was of opinion had as many advantages over the subastragaloid operation as Chopart's had, but had not the advantages claimed over the medio-tarsal operation The paper concluded by a description of metatarsalgia, Madura foot and two cases of podelcoma One case completely recovered, the second had a recurrence of the disease There was no history of any constitutional or predisposing cause why the foot was attacked by this painful disease —Mr H G CROLY considered Chopart's operation very good because if the disease was confined to all the bones in front of the medio-tarsal line a sound astragalus and os calcis were left Podelcoma required amputation of the foot Nélaton's perforating ulcer of the foot was a rare affection and was connected with certain forms of neuritis and was sometimes in connexion with a diabetic condition of urine Perforating ulcer might be easily overlooked and was very unfavourable for dealing with —The PRESIDENT said that some years ago almost any tuberculous disease of the foot was condemned, generally speaking, to a Syme s amputation He considered this to be an extremely erroneous practice, more especially in tuberculous disease as it could now be distinguished by the x rays He considered that any tuberculous disease of the metatarsal bone at least should not be submitted to any operation except upon the bone itself, and many cases of tuberculous disease were confined to the metatarsal bones The literature of the subject seemed to show that tuberculous disease of the os calcis was in reality the tuberculous disease of the foot which could be most frequently attacked with success —Mr T MYLES, Dr HENRY FITZGIBBON, Mr CHANCE, and Sir FRANCIS CRUISE also took part in the discussion

Mr T MYLES read a paper on Perforating Gastric Ulcer Amongst the most interesting of the cases on which he had operated was that of a man, aged 72 years, who after the reduction of an umbilical hernia developed symptoms of perforation The patient was under the care of Sir Francis Cruise and Dr Moran When Mr Myles was called in the patient was sinking rapidly, with great pain and tenderness, persistent vomiting of black tarry matter, evidently blood, complete absence of liver dulness, tympany, &c Operation seemed hopeless, but it was undertaken in consequence of the dreadful agony which the patient was suffering The perforation was easily found and sutured and the abdomen was freely douched with hot saline solution The patient made a complete recovery —Sir F CRUISE bore out all that Mr Myles had said in his paper The patient was almost pulseless at the commencement of the administration of the chloroform, the pulse became much better when the chloroform was changed to ether —Mr CHANCE mentioned the case of a young woman with gastric ulcer who suddenly became collapsed with symptoms of perforation Laparotomy was at once performed but thorough examination of the stomach revealed nothing The abdomen was closed and recovery followed

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY —An ordinary meeting of this society was held at 20, Hanover square, W, on March 23rd, Dr R Fortescue Fox, the President being in the chair —The adjourned discussion on the papers by Dr Douglas Kerr on the Treatment of Diseases by Heat and Dr Hedley on the Therapeutics of Heat was resumed by Dr Harry Campbell who referred to the importance of keeping the sick room warm.—Dr Bain said that nearly all the varieties of hot baths lower both the maximum and the mean arterial blood pressure He had applied a box of super heated air of 300° F to the right hind leg of a dog and had found that the blood-pressure tracing showed an initial rise in blood pressure with a subsequent fall At the same time both femoral veins were exposed and thermometers were inserted, the dog being under an anæsthetic After the lapse of half an hour the blood coming from the limb in the super-heated box was 4 8°F higher than in other parts of the body Dr Bain drew attention to the initial rise in blood pressure, as he considered that a word of caution was necessary in submitting patients with diseased arteries to this method of treatment —Dr Léon Blanc said that in cardiac disease he had used for more than 25 years without accident only tepid douche massage at 95° F during 10 minutes, believing that great heat was not advisable In gouty people he thought the true attack of gout came on only when the kidneys did not act If very hot baths or dry hot exposure be given the patient had a profuse perspiration, the kidneys did not act so well, and by the poisoning action of the retained uric acid an attack of gout arose, so that he advised hot vapour baths (called "Bertholet" at Aix) at 108° F only for local application to joints as a means of relieving pain, and never hot baths for general treatment, but only the tepid douche massage from 92 to 98° F —Dr W Ewart said that he would be the last to deny the advantages to be gained by the use of intense heat in suitable cases, but he felt considerable diffidence as to its general employment in gout and gouty affections with their dangerous cardio-vascular and renal factors The opposite method, the treatment by cold—viz, by the application of ice—was capable of yielding results no less remarkable as a local treatment in a definite class of cases and particularly in some forms of rheumatoid arthritis —Dr Heinemann said that in giving baths he got better results by the use of the higher temperatures He found that cardiac cases did not do so well in baths at temperatures from 31 5° R to 32 5° R (from 103°. to 105° F) as in baths at temperatures of from 33 5° R to 35° R (from 107° to 111° F) to commence with.—Dr Knowsley Sibley, Dr Haig, and Dr Alexander Morison also took part in the discussion —Dr Hedley in his reply, expressed the opinion that in addition to the heat rays all the rays of the visible spectrum could be made useful for therapeutic purposes There were, however, some rheumatoid cases of old standing which resisted all treatment of the kind

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in which he had performed excision of the tunica vaginalis two years previously for old standing hydrocele, no recurrence taking place He contrasted the injection method with those of excision and incision and expressed the opinion that the latter mode of treatment was more in accord with modern surgical principles — The President, Dr J D E Mortimer, Dr Vincent Dickinson, and Mr Nitch Smith took part in the subsequent discussion —Dr Vincent Dickinson read a paper on Enteric Fever Complicated by Rigors and Exacerbations of High Temperature. He showed charts of two cases, in one of which severe rigors recurred at varying intervals until the sixth week In the other convalescence had been established for three weeks, when rigors and exacerbation of temperature first commenced, and recurred at intervals of from four to seven days for five weeks the temperature in the attacks ranging from 102° to 105° F In neither of these cases could any special cause be assigned for the phenomena, they were in no way caused by constipation and there had not been any indiscretion in diet Dr Dickinson then referred briefly to the theories as to the causation of these attacks and thought they might be explained by the supposition of a saprophytic absorption from the bowels acting on the thermogenic centres which always showed a marked impressionability at the decline of enteric fever of long duration —A discussion followed in which the President, Mr A F Penny Dr Mortimer, and Mr Nitch Smith took part.—Dr B Abrahams read a paper on Modern Views in Neurology, after which a lengthy discussion took place

MIDLAND MEDICAL SOCIETY —The eighth meeting of this society was held on March 15th at the Medical Institute, Birmingham, the President Mr L. Love being in the chair —The following officers were nominated for election —President Dr Rickards. Treasurer Mr Garner Secretaries Dr Kauffmann and Mr Christopher Martin Members of Council Mr Bennett May Dr T F Chavasse, Mr Jordan Lloyd, Mr Henry Eales, and Mr J W Taylor — Dr Nelson read a note on Medical Bookkeeping without Books, in which the miseries of the visiting list ledgers, and bill making were detailed and the simplification of matters by the American card system (as organised by the Literary Bureau Company) demonstrated —Dr Stacey Wilson read a paper on the Treatment of Chorea —Mr Lawson Tait read a paper on Ectopic Gestation

Reviews and Notices of Books.

The Diseases of the Stomach By WILLIAM W VAN VALZAH, A.M , M D , Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital, and J DOUGLAS NISBET A.B , M D , Adjunct Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital. London The Rebman Publishing Company, Limited. 1899 Illustrated Pp 674 Price 20s

As an introduction to our notice of this work we cannot do better than quote the opening words of the authors "The chief excuse for the existence of a book is its individuality While it is true that the definitive features of a book are the individual views of the author the great mass of a complete work on the diseases of the stomach must consist of the results of research gathered all along the course of medical history A complete book on this subject for the use of students and physicians should contain what of knowledge there is of practical value in the past, what of truth there is in the literature of to-day, and what of information the author may have to contribute" Acting on these lines the authors may be congratulated on having produced the best monograph on Diseases of the Stomach which we have seen Rarely have we read a work on a special subject with so much interest The book is a large one and is replete with information, whilst theory is fully dealt with the whole tone is essentially practical and it consequently forms a most valuable work of reference for the practitioner The disorders of digestion are amongst the most common of the ills that flesh is heir to but are also most difficult to treat. The physiology of digestion and the principles of dietary must be fully understood in order that correct deductions can be drawn as to the successful treatment of the many forms of indigestion, and Dr Van Valzah and Dr Nisbet give very full instruction on these points The book is divided into six sections which are subdivided into chapters

Section I is headed Introduction and Classification The reader must expect to be confronted with many terms which are not met with in ordinary text-books, such as "adenohypersthenia gastrica," "adenasthenia gastrica,' &c , but the multiplication of such terms is fortunately not so numerous as is to be found in other recent publications. The classification adopted is a sound one embodying the data of physiology and pathology, and the common error of mistaking a condition for a disease is avoided

Section II deals with Diagnosis and Diagnostic Methods, different chapters being devoted to Clinical History, Physical Signs, Functional Signs (Secretion, Motor Function, and Absorption) the Bacteriological Signs and the Anatomical Signs, so that from a clinical point of view the arrangement is most complete Much stress is naturally laid on the examination of the contents of the stomach and full directions are given for the necessary procedure

Section III is entitled "General Medication" The subject is discussed under the following divisions Digestive Hygiene, Diet, Physical Remedies, Symptomatic Treatment, Physiological Treatment, Bacteriological Treatment and Chemical Treatment Certain general indications are first laid down which have to be met by the selection of a diet, the first of which alone if only followed, would lend the physician great aid in the treatment of gastric disorders It runs as follows "The quantity of food should be sufficient to supply the needs of nutrition, and the composition of the diet should approach as nearly that of the normal diet as the variety of the disease of the stomach will permit", and another rule insists that "the directions should be complete and explicit, and should be changed to meet the daily indications" Most students in completing the educational curriculum and becoming fully qualified medical men are inexperienced in the principles of diet in disease and they find great difficulty in giving the necessary directions to patients or their attendants In the pages of the work now under consideration no pains are spared to make the information as full and intelligible as possible Some readers may naturally ask what is meant by 'bacteriological treatment'? Three points are mentioned (1) chemical antisepsis, (2) removal and exclusion of the germs, and (3) change of the culture soil and removal of the pathological conditions which favour the growth of germs Chemical antisepsis is with some practitioners a very popular method of treating gastric fermentation, but it is the least efficient and most injurious The removal of the germs is more than a palliative measure, for it places the stomach in a position to perform its functions unmolested To achieve this result there is no method comparable to washing out the stomach

Section IV describes fully the Diagnosis, Treatment &c , of the Dynamic Affections of the Stomach The classification adopted will be found to be new, at any rate to English readers In Chapter 1 are considered the Sensory Dynamic Affections—bulimia, acoria, parorexia, anorexia nervosa gastralgia nervosa, and hyperasthenia gastrica The clinical descriptions are especially good Chapter 2 deals with the Dynamic Affections of Secretion, and Chapter 3 with the Motor Dynamic Affections, such as spasm eructatio nervosa habitual regurgitation, nervous vomiting, &c In Chapter 4 an excellent account is given of Neurasthenia Gastrica, the

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biological filter or tank might be placed before any more elaborate system of drainage is attempted, simplicity being of the utmost importance This would not be considered as final, one only of the many evils at present existing being overcome thereby The difficulty of cost is, of course, even greater in India than here, the reluctance of natives to spend money upon these matters being well known Mr Silk's pamphlet is educational and will certainly serve a useful purpose in promoting in India a knowledge of the more recent and natural methods of sewage disposal which are such a decided advance upon the older systems

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System of Diseases of the Eye By American, British Dutch French, and German Authors Edited by WM F NORRIS M.D and CHARLES A. OLIVER M D, of Philadelphia U S A Vol III With 50 Full page Plates and 186 Text Illustrations London and Philadelphia J B Lippincott Company 1899 Pp 962 Price 21s net

THIS volume is perhaps the most important of the "System" since it deals with nearly all the local diseases with the exception of those of the lens and is the one which will consequently prove most useful to the practitioner who is not devoting himself to the exclusive study of the diseases of the eye, whilst for the specialist it supplies a large amount of information on subjects which have recently been discussed in continental journals—information which is as a rule, not very easily accessible The several articles and their authors are in the following order —Diseases of the Orbit, by Charles S Bull M.D, Professor of Ophthalmology in New York, Diseases of the Eyelids, by George C Harlan M.D, Surgeon to the Wills Eye Hospital, Philadelphia, Operations performed upon the Eyelids by the same author, Diseases of the Lacrymal Apparatus, by Samuel Theobald, M D, Ophthalmic Surgeon to the Johns Hopkins Hospital, Baltimore, Diseases of the Conjunctiva and Sclera, by Swan M Burnett M.D Professor of Ophthalmology in the University of Georgetown, Diseases of the Iris and Ciliary Body, by W A Brailey, M D Cantab, Ophthalmic Surgeon to Guy's Hospital, and Sydney Stephenson M B Edin, Ophthalmic Surgeon to the North Eastern Hospital for Children, Diseases of the Choroid and Vitreous, by A Hill Griffith, M D Aberd, Honorary Surgeon to the Royal Eye Hospital, Manchester, the Anatomy of Staphyloma Posticum and the Relation of the Condition to Myopia, by Isidor Schnabel, Professor of Physiology in the University of Vienna, Diseases of the Retina, by Joseph Schöbl, M D, Professor of Ophthalmology in the University of Prague, Diseases of the Optic Nerve, by Johann Deyl, M D, Professor of Ophthalmology in the University of Prague, Glaucoma, by Priestley Smith, M.R.C S Eng, Ophthalmic Surgeon to the Queen's Hospital, Birmingham, Wounds and Injuries of the Eyeball and its Appendages by Emil Gruening, M D Ophthalmic Surgeon to the New York Eye and Ear Infirmary, Sympathetic Ophthalmia, by Robert L. Randolph, M.D, Ophthalmic Surgeon to the Johns Hopkins Hospital, Baltimore, and, finally, Operations usually performed in Eye Surgery, by Herman Knapp M.D, Professor of Ophthalmology in Columbia University, New York.

Dr Samuel Theobald's article on the Diseases of the Lacrymal Apparatus is carefully written and the numerous methods which have been proposed for the relief of stricture of the canaliculi and nasal duct are well classified and clearly described He gives a drawing of a gold cannula which was introduced into the nasal duct of a woman by his grandfather and which remained in position for no less a period than 25 years Dr Theobald adopts Sir William Bowman's proceeding of slitting up the canaliculus operating in general upon that of the lower lid Considerable experience has led us, unless great discomfort is experienced by the patient, to be content with the occasional passage of moderate sized probes Slitting up the canaliculus sometimes does more harm than good and the introduction of very large probes which seems to have proved very serviceable in Dr Theobald's hands does not always prevent lacrymation the condition which the instruments were designed to cure He has also practised with success the passage of probes through the lower orifice of the nasal duct, a proceeding which on account of its difficulty has fallen into disuse In the article devoted to Diseases and Operations upon the Eyelids Dr George Harlan gives many drawings illustrating the various incisions which have been adopted for the cure or relief of entropion and ectropion Dr Knapp's account of the operations on the eye in common though they overlap the statements made in other parts of the "System"—as, for instance, the article just referred to by Dr Theobald—are yet owing to his large experience, worthy of careful perusal

The Diseases of the Iris and the Ciliary Body are described jointly by Dr Brailey and Mr Sydney Stephenson The affection termed 'keratitis punctata' is considered at some length Until a recent period the grey circular spots arranged in the form of a triangle with the base towards the periphery of the cornea and on its inner surface have been considered to be due to the proliferation of the cells lining the membrane of Descemet but they are now regarded according to these authors as deposits thrown as it were against the posterior surface of the cornea from the aqueous humour and as primarily coming from the ciliary body and are hence to be regarded as the products of cyclitis Examined microscopically they consist of collections of round nucleated cells cemented together by a varying amount of fibrinous material This view does not explain very satisfactorily their discrete yet regular arrangement, their long persistence in an unchanged form, and their little disposition to coalescence such as might be expected if they were either growing *in situ* or were the result of a kind of precipitation from the aqueous Hermann Snellen believes that they contain micro-organisms capable of being grown upon agar agar In discussing indo-cyclitis, instead of giving the usual division into serous, plastic, and purulent, the authors adopt an etiological classification admitting primary secondary, and sympathetic causes and dividing the primary causes into syphilitic, rheumatic, gonorrhœal, gouty diabetic, herpetic malarial, climacteric, cerebral, scrofulous, tuberculous traumatic, post febrile, cachectic, and idiopathic—a division which enables them to consider most of the forms of iritis in an orderly fashion, though, as they themselves admit, the disease may be attributed to many other causes if isolated recorded cases are taken into consideration such as albuminuria, and dental, nasal, or uterine troubles The article on Diseases of the Retina is one of the longest in the book and is from the pen of Dr Joseph Schöbl, the Professor of Ophthalmology in Prague It has been well translated into English by Dr Adolf Alt, and in the extent and variety of the information which it contains it constitutes sufficient evidence of the advances due to the employment of the ophthalmoscope, which have been made in the diagnosis and treatment of diseases of the eye during the last 50 years A few pages are devoted to retinal affections in the classical treatises of Mackenzie, Lawrence and Middlemore Dr Schöbl calls attention to the fact that the ophthalmoscopic examination of the eye affords a very reliable test of death for just at death the papilla is blanched the whole fundus suddenly pales, the arteries become narrow and the veins empty centripetally, their blood columns breaking until they resemble a string of beads Half an hour after death the fundus of the eye is yellowish white, the papilla is chalky-white

clinical description and differential diagnosis being particularly well written, and the same may be said of the chapter on Myasthenia Gastrica

The Anatomical Diseases of the Stomach are described in Section V These include the various forms of gastritis, ulcer of the stomach, neoplasms of the stomach, displacement of the stomach, and obstruction of the orifices

Section VI is entitled "Vicious Circles of the Stomach" Under this head is discussed the condition of "other organs in the diseases of the stomach, or the stomach in the causation of disease", thus we find sub-sections headed Influence on the Intestines, Influence on the Nervous System, &c Finally a chapter is devoted to the consideration of the Secondary Diseases of the Stomach These are produced by the diseases of a large number of other organs and as a rule, but not always, bear no marks which would reveal or suggest their origin These considerations are fully entered into, completing a volume which forms a most valuable addition to medical literature

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Recent Methods of Sewage Disposal in England By A E SILK, C E, Sanitary Engineer, Bengal Calcutta Bengal Secretarial Press

THE object of this pamphlet appears to be to promote discussion as to the desirability of introducing into India some form of biological filters for the treatment of sewage The constituents of sewage in English towns are first glanced at, so that a comparison may be formed with those of the sewages common throughout India A short sketch is given of some of the methods adopted in England within the last few years, including Mr Dibdin's experiments at Barking and Sutton, Mr Donald Cameron's septic tank at Exeter, and the filters of Mr I Garfield, C E, at Wolverhampton Mr Silk next proceeds to discuss the applicability of some such system to the conditions prevailing in India, which differ materially from those that obtain in England Mr Silk, writing for Indian readers, presupposes a knowledge of local details with which it is possible some of our English readers are unfamiliar It will be better, therefore, first to mention that in India no system of sewerage as we understand it exists except in a few isolated cases Any regular supply of water by pipes is only to be found in the houses of the rich The use of commodes in India is common to Europeans A coolie called a "mehter" collects the contents of these commodes in a large receptacle which is emptied into an iron cylinder mounted upon wheels and drawn by a bullock to the trenching ground In the prisons these matters are simplified Each prisoner uses two small bowls placed on the floor of the compartments into which the latrines are divided The prisoner squats with these between the legs, one in front to receive the urine and one behind for the fæces The bowls containing the solid excreta are collected and the contents placed in a large churn containing earth The churn is then set in motion and its contents having been intimately mixed are superficially buried The urine is thrown into a ditch or drain receiving the slop water This method is found to be most successful Some few of the barracks are now provided with a system of drainage, but commonly rows of earth-closets are employed Earthenware vessels are used in place of iron pails, the contents of which are collected and disposed of in the usual way The public latrines referred to by Mr Silk are a constant source of despair to the engineer The great aim has been to keep the solid constituents of the sewage apart from the liquid, so that the contents of the latrines, the removal of which to the trenching ground occurs once only in 24 hours, shall be less sloppy and repulsive than it otherwise would be, but this is found in practice to be most difficult to accomplish Each native Indian, in compliance with a law of caste, uses one pint of water for ablution after relieving himself In addition to this the latrines are used as public urinals, so that their condition in the presence of a dense population is better imagined than described Some houses even have an earth closet placed upon the roof, the liquid matter escaping down the pipes provided for the rain water This, together with the household slop water, if not thrown upon the ground of the compound, runs off through a number of rough independent drains into ditches, whatever of it has not been lost through evaporation or by percolation into the adjacent tanks and wells reaches the river, which river is not infrequently the principal source of water supply The liquid matter from the public latrines is treated in the same way This applies principally to the districts where the rivers form the natural drain to the land which rises on either side Where the rivers pass through the plains and delta they are more elevated and the natural drainage is away from and not towards them Here the slop water and the rain water from towns situated along the banks are frequently directed into some lake. Pits several feet deep used to be dug at the trenching grounds to receive the sewage, these were covered over with earth when full It is needless to say how objectionable such a practice was found to be, the smell from these horrible heaps being carried by the wind for a mile or more The present system is to dig a trench from one to three feet deep and to cover its contents with the earth from the next trench This practice is but a slight improvement upon the previous one More recent knowledge has shown that all effete organic matter must be buried quite superficially, as it is principally in the first few inches of the soil that bacterial life is most abundant and active If buried deeply a very indefinite time elapses before its conversion into humus It is therefore evident that the burial of such large quantities of organic matter at such a depth below the surface is inimical to success. Without any sufficient provision of subsoil drains to carry off the enormous amount of rainfall, often 60 inches in a few months, these grounds at such times can be little short of pestilential The difference in the composition of the sewage is the first question to be considered, that in India being much more highly concentrated This probably would not militate against success, though the construction of the filters might require modification to prevent clogging It would at first sight appear that the form of filter best suited would be one in which the action was upwards Mr Silk has not in his pamphlet described such a filter but several have been tried most successfully[1], one especially now being fixed at one of our large regimental barracks would upon a smaller scale probably be well suited for use with each individual latrine Mr Silk contemplates some difficulty, as he states that it would be impossible to have an open bacteria filter bed exposed to the fierce rays of an Indian sun, though if by reason of its size it were impossible to protect it by roofing, still in any case the level of the effluent should be kept well below the surface of the filtering media Those only are competent to judge in these matters who have a practical acquaintance with the requirements and conditions of the individual districts to be dealt with, which in a country such as India are most diverse The question is one which has engaged the attention of many in this country recently Professor W J R Simpson, Professor of Hygiene at King's College, London, who has had great experience in Indian sanitation as Medical Officer of Health of Calcutta, is in favour of a continuance of the present porterage system of sewage removal to a point at which some form of

[1] See the Report of THE LANCET Special Commission on the Water-supply and Disposal of Sewage in Rural Districts March 4th, 1899.

account of the Pathology of Quinine Blindness Experimentally Induced, with illustrations Dr S Risley recorded a successful case of Implantation of Sponge in the Orbit after Enucleation and also reported on the Action of Cassaripe, a new remedy for the treatment of corneal ulcers and other infectious diseases of the eye, it is derived from the cassava plant Dr G Hay discussed the Position of the Eyeball during the Listing Rotation Dr T V Sutphen gave an account of Recovery from Sympathetic Inflammation consequent upon Adhesion of the Eyelid to the Stump Dr Adams gave the details of two cases of Premature Delivery induced to Preserve Sight. Dr Wheelock Rider contributed an article of some originality on Unilateral Winking as a Test for Comparative Visual Activity Dr J Worrall gave a case of Recovery from Sympathetic Neuro-retinitis induced by a stab of the eye with a knife Dr Minor reported an interesting case of a man learning to see at 40 years of age Altogether it will be noted that the meeting was a successful one

An American Text book of Gynæcology, Medical and Surgical, for Practitioners and Students By Various Authors Edited by J M BALDY, M D With 341 Illustrations in text and 38 Coloured and Half tone Plates Second edition, revised Philadelphia W B Saunders 1898 Price 34s —During the four years that have passed since the appearance of the first edition of this book the subject of gynæcology has undergone considerable expansion, especially as regards the devising of new operations and of new methods of performing old operations In accordance with this we find that the changes in the second edition are largely concerned with methods and details of operations A number of new figures have been added and old ones cut out and amongst the latter we are glad to see that nearly all the figures of instruments, a particularly useless variety of illustration, have been eliminated The majority of the new figures are good and clear, especially those illustrating abdominal hysterectomy and vaginal hysterectomy with the use of clamps Pryor s operation of posterior vaginal section is fully described and illustrated and is strongly recommended for the surgical treatment of retro-displacements Amongst other new or revised matter we notice a description of Freund s and Baldy's operations for the treatment of prolapse of the uterus The section upon Diseases of the Bladder and Urethra has been practically re written and the whole book bears evidence of careful revision The authors are to be congratulated upon having kept the book practically of the same size as before in spite of the large amount of new material which they have added, so that it still merits its title of a text book The list of authors remains the same as in the first edition, and as we said then the book is a valuable one and will be especially useful to the student, inasmuch as it contains a large amount of information upon special points in the technique of gynæcological operations which is not to be found in the ordinary text-book of gynæcology

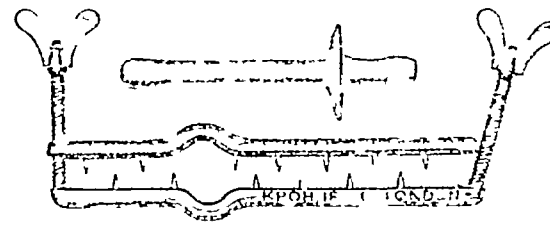
DEATH-RATE OF BATH RURAL DISTRICTS—At the meeting of the Bath Rural District Council held on March 25th Mr C Harper the medical officer of health, presented his report for 1898 which stated that the number of deaths in the 17 parishes comprising an area of 27 268 acres with a population of 28 050, amounted to 376 giving a death rate of 13 40 per 1000 During the year there were 807 births registered, giving a birth rate of 28 7 per 1000

THE GLOUCESTER GENERAL INFIRMARY AND GLOUCESTERSHIRE EYE INSTITUTION—At the quarterly meeting of this institution held on March 30th, under the presidency of Colonel Curtis Hayward, the chairman stated that during the past 10 years the expenditure of the infirmary had increased by £1000 a year, while the income had only increased by £200

New Inventions.

A COLOTOMY CLAMP

IN 1889 Mr Herbert W Allingham introduced his clamp with parallel bars provided with spikes and closed by means of screws, which latter have been materially improved by Mr W Phayre Ryall In order to allow flatus to be passed whilst the clamp was applied I have had made by Messrs Krohne and Sesemann of Duke street, W, a modification in which the parallel bars when screwed into apposition leave a circular hole situate at one-third from the end to cover the proximal end of the bowel The hole is large enough to



admit the passing of a shortened gum elastic or bone enema pipe, such as is used in a Higginson s enema The upper end of this tube may have an indiarubber tube attached so as to bring it outside all dressings Mr Ryall's screws with hinges at the ends of the bars were adopted I applied this clamp on the third day in a case of right inguinal colotomy and found that it answered to my entire satisfaction

F A PURCELL, M D, M Ch R U I

Manchester-square, W

A DROPPING BOTTLE AND A SPECIMEN JAR

THE subject of Fig 1 is an improved pattern of Chalk s dropping bottle, manufactured by Mr A H Baird, 39, Lothian street, Edinburgh It will be seen that the dropping tube goes well to the bottom of the bottle and that in the bottom there is a depression in which any sediment may collect The dropping tube has an indiarubber cap—

FIG 1

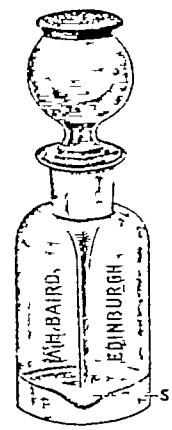
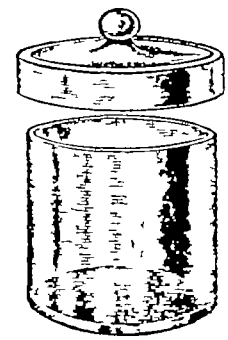


FIG 2



not a piece of sheet rubber tied over it The price of these bottles is 10d each or 9s per dozen Fig 2 is a glass specimen jar with a loose glass lid. It is claimed for these lids that the vapour condensed on them drops back as fluid into the jar so that the loss of fluid by evaporation is minimised The stock sizes of these jars vary from 5 in to 13 in in height and from 3½ in to 10½ in in breadth Mr Baird also makes glass specimen jars with nickel plated screw caps and stoppered specimen bottles of a squat form with extra wide necks, useful for holding catgut, dehydrating sections, cleaning cover glasses &c

the arteries are invisible, and the veins are thin and almost empty Dr Schöbl describes no less than four forms of senile degeneration a form in which the retina appears veiled especially about the disc, with in some instances dull grey points and molecular masses and in others round, highly refractive bodies, a second form, due to colloid excres cences of the lamina vitrea of the choroid, a third associated with retrogressive changes characterised by the presence of crystals of carbonate of lime or of cholesterin, the opthalmoscopic appearances resembling those of retinitis albuminurica, and a fourth form in which numerous plaques coalesce in the circumpapillary region forming a whitish yellow ring that is bordered with pigment about the disc Dr Schöbl has met with eight cases of persistent hyaloid artery in 180,000 cases which he has seen and he gives some good illustrations of the appearances presented He dis cusses the varieties of sarcoma and establishes the following forms simple glioma, glioma retinæ luxurians, crypto glioma, fibro glioma, telangiectatic glioma, and finally describes a case in a child which he thinks was primarily a pure retinal glioma but which when it spread into the sclera produced proliferation with the formation of a glio fibroma. When the glioma cells spread into the orbital tissue they started a proliferation in this locality, round and subsequently spindle cells were formed and thus a glio-fibro sarcoma resulted The same process was repeated with the unstriped muscular tissue of the blood vessels and so at length in its final stages the tumour represented a glio fibro-sarco-myoangioma which illustrates well the variety of forms which may be found in a single specimen The whole of this article is very well written and very great pains have been taken by the author in collecting cases The article on Diseases of the Optic Nerve is written by Dr Johann Deyl, also a Professor of Ophthalmology in Prague In describing hæmorrhage of the papilla the author of the article makes the important statement that in those cases of arterio-sclerosis in which rupture is imminent, or has already occurred either in the retina or on the disc, pressure on the globes with the finger no longer excites pulsation in the degenerated arteries, and he attributes this to the induration of the walls of the vessels Speaking of intra ocular neuritis he accepts Uhthoff's definition of that condition as a swelling of the optic disc which does not exceed three dioptres from the level of the retina, whilst when the height of the swelling exceeds this it is to be considered as a "choked disc" The former affection not infrequently passes into the latter and the various theories explanatory of the causes of the appearances presented in "choked disc" are well given, and Dr Deyl supplies accurate information in regard to the course and relations of the arteria centralis retinæ As might be expected from Mr Priestley Smith the account of Glaucoma is an excellent monograph Without being unduly extended all the principal points in the etiology, symptomatology, pathology, and treatment are given He dwells upon the greater liability of small eyes to glaucoma and remarks that eyes in which the cornea measures only 10 millimetres in the horizontal diameter seem seldom to escape an attack

We must not terminate this notice without a word of com mendation of Dr Robert Randolph's essay on Sympathetic Ophthalmia He draws a very clear dividing line between sympathetic ophthalmia and sympathetic irritation and gives the results of numerous experiments which he himself has made to elucidate the etiology of this obscure affection The editors, Dr Norris and Dr Oliver, are to be con gratulated, alike on the judicious selection of authors which they have made as evidenced by the excellence of the several articles, upon the translations which have been made by Dr Reed, Dr Alt, and Dr. Sattler, and also upon the remarkable freedom from typographical errors The illustrations are as a rule good and there is an excellent index.

Kirkes' Handbook of Physiology Edited by W D HALLI BURTON, M D Lond, F R S, Professor of Physiology, King's College, London Fifteenth edition, with upwards of 650 Illustrations, including some Coloured Plates London John Murray 1899 Pp 872 Price 14s

ALTHOUGH three years have not elapsed since the publication of the fourteenth edition of this standard work a considerable number of minor alterations and additions have been made concurrently with the recent advances in physiology, whilst some paragraphs have been omitted The principal changes are to be found in the description of the nervous system—the account of the central organs being relegated to the latter part of the book—in the description of the circulation and in the chapter dealing with development In dealing with the subject of the circulation the method devised by G N Stewart of estimating the output of the heart has been introduced together with an account of the cardiometers of Barnard and of Roy and of the results of the experiments of Leonard Hill demonstrating the correctness of the Monroe Kellie doctrine This doctrine is to the effect that the quantity of the blood in the brain remains tolerably constant Also details are given of Hill's experiments on the effect of gravity on the circulation as shown by suspending rats or rabbits by the ears and examining the condition of the vessels The measurement of the blood pressure in man is shown to be practicable and a woodcut is introduced of Hill and Barnard's sphygmometer A paragraph is introduced on the crystallisation of proteids Every chapter seems to have been brought up to date with equal care and the volume stands not only as the most recent but as one of the best works on physiology extant

LIBRARY TABLE

Transactions of the American Ophthalmological Society Thirty fourth Annual Meeting at New London, Conn, 1898 Hartford Published by the Society 1898 —The thirty fourth annual meeting of this society was held under the presidency of Dr George O Harlan The first paper read before the meeting was by Dr Lucien Howe in which the question proposed was—why is the proportion of blind in cities less than in the country? and the answer given was that less attention is paid in the country to the prophylaxis of purulent ophthalmia of new born children than is the case in towns To this article is appended a report on resolutions relating to purulent ophthalmia supporting the method of prevention of this disease adopted by Credé Dr Bull gave the details of a case of Gunshot Wound of the Eye and also read a paper on Some Unusual Tumours of the Orbit, Eyelids, and Vicinity, and various cases of tumour were reported by Dr Friedenberg, Dr F M Wilson, Dr Gruening, and Dr de Schweinitz The Best Mode of Operating for Secondary Cataract was discussed by Dr H Knapp who laid down the cardinal rule that cutting was always preferable to tearing Dr Robert Sattler has practised with success Removal of the Lens in cases of High Myopia He also contributes a good article on the Surgical Treatment of Keratoconus Dr Samuel Theobald, in a paper on the Treatment of Entropion, recommended the employment of caustic potash on the ground that the desired effect can be obtained more exactly with this agent than by other methods Dr Myles Standish reported several cases of Lymphoma of the Lids, Dr Hansell a case of Interstitial Keratitis, and Dr John Green and Dr Arthur Ewing a case of Hypopyon Keratitis, with illustrations The President, Dr G Harlan, communicated a series of cases of Delayed Union after Cataract Extraction Dr B Fryer gave the results of using Protargol in the Antiseptic Preparation of the Conjunctiva prior to Cutting Operations of the Eyeball Dr Ward Holden gave an

THE LANCET.

LONDON SATURDAY, APRIL 8, 1899

OUR readers will have seen in THE LANCET of April 1st, under the head of Parliamentary Intelligence, that the Lord Chancellor has introduced into the House of Lords a Bill entitled, "Companies (Medical Profession) Bill," the object of which is to prohibit the profession or business of physician, surgeon, dentist, or midwife being carried on by a company The title and the Bill itself are a model of brevity The whole consists of four paragraphs—title and clauses all included The one essential clause runs as follows

"It shall be unlawful for a company under the Companies Acts, 1862 to 1898 to carry on the profession or business of a physician, surgeon, dentist, or midwife, and if any company contravenes this enactment it shall be liable on summary conviction to a fine not exceeding £5 for every day during which the contravention happens"

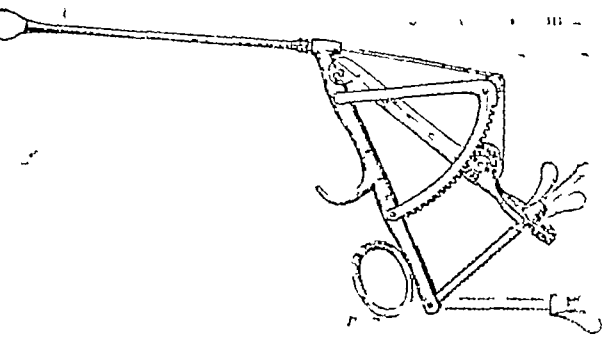
There is much public feeling on the subject of limited liability companies and the sins which are committed under the legislation which was meant to regulate them and make them a public benefit There is much difference of opinion, also, on the question as to how far the development of the principle of incorporation for commercial purposes has been an advantage But on one point there does not seem room for any difference of opinion—viz, that the principle of incorporation was never meant to be used to legalise an action on the part of a member of a limited company which would be illegal and punishable if committed by the same individual in a private capacity It is illegal, for example, for any individual not called to the bar or qualified as a solicitor to act as a barrister or as a solicitor And so far as we are aware the most audacious exploiters of the principle of incorporation, or rather of its application to the practice of professions by individuals not possessed of the legal qualifications for such practice, have not attempted its application to the practice of the law But an outrage not less scandalous has been committed by companies in assuming, in utter defiance of the Medical and Dentists Acts, the styles, titles, and functions of the medical profession, although no members of the profession were included in their membership They have done so with impunity hitherto because the penal clauses of these Acts apply to "persons" not to a company It would take up too much of our space to give particular instances, but such instances may be found in the volume of Minutes of the General Medical Council for 1898 in Appendix xiv, where the whole action of the General Medical Council and of other bodies on this subject in recent years is described

To ordinary intellects it will not appear very clear why the law which requires qualification in barristers and solicitors is so much more difficult to defy than that which requires qualification in medical men But the courts have given decisions which enable any group of illiterate and uneducated persons to carry on the business of medical men or dentists without the personal qualification which in individuals is supposed to be essential The evil and the absurdity have long occupied the attention of various bodies, including the British Medical Association, the British Dental Association, the Medical Defence and Protection societies, the Royal College of Veterinary Surgeons, and the Pharmaceutical Society of Great Britain The profession is specially indebted to the Companies Acts Amendment Bill Committee of the General Medical Council, consisting of Sir WILLIAM TURNER, Mr HORSLEY, Mr TOMES, and Mr TICHBORNE, who very particularly brought to the notice of the Council the action of a drug company in Cork registered under the Companies Acts which had intimated that "one of its objects was to carry on the business of physicians and surgeons" Among the signatories of the memorandum of this association there was no qualified medical man and not even a qualified pharmaceutical chemist The grievance thus displayed was practically admitted by a Departmental Committee of the Board of Trade which under the presidency of Lord DAVEY, had the matter under its consideration There was, in fact, no possibility of denying the absurdity of a state of the law which enabled persons who might have been fined for practising medicine or dentistry in their individual capacity to call together their friends and relatives, equally unqualified with themselves, and form a company under whose name the business of giving medical and surgical advice and assistance and medicines could be carried on with impunity Fortunately the Lord Chancellor and several other law lords have taken much personal trouble to amend this absurd and discreditable state of the law

The present Bill is the outcome of this trouble Opinion will be divided as to the form and probable efficiency of the remedy Attempts have been made previously to embody clauses in Companies Bills or in Pharmacy Bills which would have met this acknowledged evil The opinion has been strongly held by some that as the mischief has been done by an abuse of the Companies Acts and a misapplication of the principle of incorporation any remedying clause should be embodied in an amending Companies Act Theoretically this would seem desirable, but many difficulties would have to be overcome before such a Bill would pass, or before an effective clause could be put into a Medical or a Pharmacy Bill dealing with such totally different matters We are therefore grateful for a special Bill correcting directly the defects of the Companies Acts so far as the practice of medicine, surgery, dentistry, and midwifery is concerned The essential clause of the Bill enacts such an obvious principle that any effective opposition to it is scarcely imaginable We would suggest the addition of the words, "or any member of a company in its name" after the words "the company" in the first line of the above clause Possibly they are superfluous, but we are dealing with a class of persons who singularly combine stupidity with audacity, and we venture to think that this addition would tend to make them more cautious in attempting to evade the law than they would be under the present form of the clause As laymen, too with

A NASAL SNARE

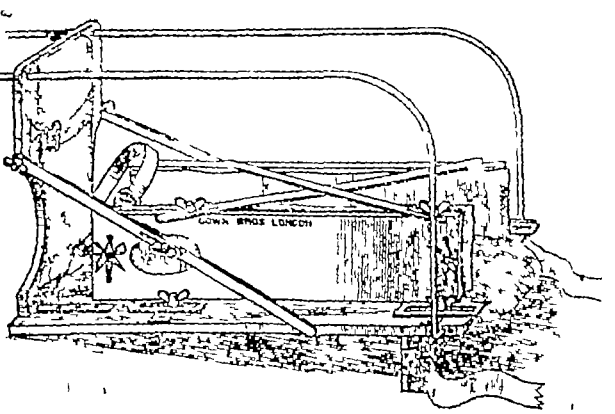
DR ERNST R BROWN of Montreal has designed a nasal snare which unites the qualities of simplicity of construction, lightness, and strength As shown in the engraving the wire which forms the loop is led over a guide pulley and fastened to a wheel in connexion with the pinion seen beside the rack The loop is tightened by making pressure with the thumb so that the force employed is exactly known, whereas in the patterns of snare worked by a spring and ratchet only an approximate estimate of the force can be obtained The advantages of this quality in dealing with nasal polypi are obvious The screw and fly nut enable the operator to proceed cautiously and also to stop the action at any stage



Owing to the length of the rack a loop of considerable size may be employed and it can, moreover, be tightened up very quickly The finger rest is a material assistance in the holding of the instrument The barrel is of the ordinary shape and size, it is not made in one piece with the frame, but fits into a socket from which it can be pulled out when the strain on the wire is released by removing the thumb from the lever, the loop is then again made ready This snare works without the clicking noise made by some of the other modifications of the instrument and all the parts being of metal are easily sterilised The makers are Messrs Mayer and Meltzer Great Portland street, London, W

A NEW FRACTURE APPARATUS

THIS apparatus has been designed with a view to furnish every requisite for treating any fracture of the leg or foot in an easily portable form and at small cost It has a back splint into which a foot-piece can be fitted, so as to suit the different lengths of limb at any desired



angle Two side splints are attached to the back splint by travelling screws in such a manner as to admit of any required degree of approximation at either end and are therefore capable of accurate adjustment to the different diameters of the leg The same arrangement permits, of their being altered at will as swelling takes place or diminishes, or for the application of dressings, &c, without disturbance of the fracture A rectangular rod passes from either side of the back splint to the top of the foot-piece, and forms a cradle As the limb is exposed to view during the entire course of treatment any displacement can be at once rectified The splint is manufactured by Messrs Down Bros, 21, St Thomas's street, London, S E

F ST JOHN KEMM, L R C P, L R C S Edin
Worle Weston-super-Mare.

THE PREVENTION OF TUBERCULOSIS

(Continued from p 961)

LEEDS

ON March 24th a conference was held at the Town Hall, Leeds, upon the Prevention of Tuberculosis, at which the Lord Mayor presided The meeting was held in the Lord Mayor's private rooms His lordship had invited to the conference the medical staffs and committees of management of the various medical charities in Leeds, the Corporation Sanitary Committee, the President and officers of the Leeds and West Riding Medico Chirurgical Society, the committee of the Leeds Sanitary Aid Society, and the Holbeck Sanitary Association The Lord Mayor in opening the proceedings referred to the importance of the subject for which they had been called together Dr J E Eddison, who opened the discussion, moved the following resolution —

That a committee be formed to make inquiries as to the best way of establishing special wards or a special institution for the treatment of poor people suffering from tuberculosis, particularly phthisis.

This was carried unanimously and after the election of the committee and the passing of the usual votes of thanks the meeting terminated

CHESHIRE

The Cheshire County Council recently undertook some experiments with herds at their dairy institute at Worleston to demonstrate the reliability of the tuberculin test in animals Experiments were also undertaken at the agricultural school at Holmes Chapel The number of cows in Cheshire is 195 per 1000 acres The tests were conducted by Mr Laithwood, the chief veterinary inspector for Cheshire, and the results were as follows In the Worleston herd out of 54 animals 37 were healthy, 14 reacted, and three were classified as doubtful, in the Holmes Chapel herd of 17 animals 13 were healthy, three reacted, and one was doubtful Nine of those which reacted were slaughtered and examined in the presence of competent witnesses All the carcasses were tuberculous, tubercle being chiefly found in the glands, the lungs, and the livers All the carcasses were, however, declared fit for food and were sold, being nine in all, for a total of £97 7s The remaining animals which reacted have been isolated and experiments as to the curability of tuberculosis will be made

ST HELENS

The medical officer of health of this county borough, Dr F Drew Harris, has issued a report to the health committee on the prevention of tuberculosis, especially among children, and also on some means by which the excessive infant mortality may be controlled He is of opinion that improper feeding is the great cause of the high infant mortality and he advocates sterilisation or Pasteurisation of milk He describes the Goutte de Lait Society inaugurated at Fecamp by Dr Dufour which supplies mothers unable to suckle their children with sterilised and humanised milk A marked diminution in the mortality has been noticed since the society began its work only four years ago

BATH

A deputation of medical men waited on the mayor of Bath on March 20th to ask him to call a public meeting to form a local branch of the National Association for the Prevention of Consumption and Other Forms of Tuberculosis The deputation was introduced by Dr Weatherly Dr Symons, the medical officer of health of the city, urged the establishment of public slaughter houses The mayor said that he certainly would summon a public meeting to discuss the questions put before him by the deputation.

health and injure the interests of some 5,000,000 people? Besides, experience shows that even the butchers themselves would benefit by the establishment of public slaughter-houses We dealt with this point in a leading article in our issue of March 25th and Dr BOND tells us that in Glasgow, where private slaughter houses have been abolished, the butchers now express a strong opinion that the public slaughter houses are preferable to the old system What, then, remains in the way of this much needed reform? Nothing beyond the ignorance and apathy of the people The Sanitary Institute will accomplish a good work if it can stir the population of London to take action in this matter

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IN the April number of the *Practitioner* are printed the opinions of a symposium of experts upon the subject of cancer That this is a matter possessing a very real and definite interest for everyone of us there can be no doubt The pathology—or rather the etiology—of the disease is at present an inexplicable problem to medical men, while its universality, its malignity, and its insidious course render it an object of dread both to those who are unfortunately attacked by it and to those whose duty it may be to try to treat it successfully Many of the subjects discussed have already been dealt with by the same writers in the columns of THE LANCET, so that our readers will be already cognisant of some of the facts here presented The great question as to whether cancer is really increasing is dealt with by Dr A NEWSHOLME as regards the United Kingdom Dr ROSWELL PARK contributes a paper in which are considered firstly the increasing mortality from cancer in the State of New York, secondly the arguments pointing in favour of the parasitic origin of the disease, and thirdly the work on the matter already done and in prospect in the New York State Laboratory Mr ALFRED HAVILAND writes on the Medical Geography of England and Wales and Mr D'ARCY POWER on the Local Distribution of Cancer and Cancer Houses Mr H G PLIMMER discusses the Etiology and Histology of Cancer, his paper is well illustrated and gives a very full account of his researches[1] Professor J MCFADYEAN discusses the Occurrence of Cancer in the Lower Animals and Mr WATSON CHEYNE opens the practical part of the symposium by answering the question, 'What can surgery do to relieve sufferers from cancer in various parts of the body?" The last paper is by Dr W B COLEY, the introducer to the profession of Coley's Fluid, and is on the Treatment of Inoperable Cancer Finally the "medico-literary causerie" lays before us interesting information as to those scandalous deceivers, the self styled cancer-curers

The study of cancer is not one calculated to inspire cheerfulness, so perhaps it is as well that Dr NEWSHOLME, whose article is the first of the series, considers that the conclusion that a real increase in the mortality from cancer has occurred during recent years is not justified by statistics "They rather tend to the conclusion that the increase in cancer is only apparent and is due to improved diagnosis and more careful certification of the causes of death, especially to the latter It is obvious, however, that this conclusion is only one of probability"

[1] THE LANCET March 25th, 1899 p 826.

Dr ROSWELL PARK'S and Mr PLIMMER'S papers appear to show conclusively that in and among cancer cells there are appearances which do not belong to the cells themselves but are something foreign to their proper structure and development, and Mr PLIMMER claims to have isolated such bodies, to have cultivated them outside the body, and by injecting such cultures into animals to have caused their death together with the production of tumours, so far of endothelial origin with the one exception of the cornea From these tumours pure cultures, he states, can be made which if inoculated will produce like growths. In connexion with these discoveries it is interesting to note that the researches of Mr ALFRED HAVILAND and Mr D'ARCY POWER upon the Geographical Distribution of Cancer and upon Cancer Houses respectively all go to show that cancer is an infective disease, that locality is a predominant factor, and that possibly cancer may be propagated from some intermediate host, as is malaria, and as malaria or some similar disease attacks the lower animals so do malignant growths Although not many years ago such an idea was scouted, yet Professor MCFADYEAN has collected 63 cases of cancer in the domestic animals Notwithstanding that it is so common among human beings cancer of the tongue, uterus, or mammary gland is exceedingly rare among the lower animals Mr WATSON CHEYNE gives very hopeful results obtained by early and extensive operation To take operations for cancer of the breast, he knows of 11 patients now alive with no sign of recurrence at periods of from six to nine and a half years after operation, forming about 50 per cent. of the cases operated upon in the period under review[2] With regard to inoperable cancer Dr COLEY considers that his mixed toxin treatment offers the best chance of relief He allows that the effect is far more marked in the sarcomata and varies considerably in them, being least marked in the most malignant form—namely, the melanotic

Our contemporary has produced a useful summary of our present knowledge and ideas upon the subject of cancer. Shall we ever be able to cure it with certainty or, still better, to prevent it? It is conceivable that cancer may be found to depend upon some parasite the life history of which can be studied, as in the possibly analogous case of malaria, and some connexion may be found between such parasites and the low lying river valleys with clay soils in which cancer, as observed by Mr HAVILAND and Mr POWER, mostly flourishes Such a line of investigation appears to offer the best hope of future success In the meantime we have to rely on the knife and above all on early diagnosis and wide removal Another point to which every worker in this field should attend is that of hope Rightly enough is despair condemned by theologians as one of the special assaults of the Evil One As the "medico-literary causerie" reminds us both ROBERT BOYLE in 1664 and Sir JAMES PAGET have laid stress upon the necessity of never giving up the struggle with disease while life remains We may, and do as a fact, know little about cancer, its treatment is even now far from satisfactory, and the road that leads to death from it but very little less dreadful both to the patient and his friends than ever it was But the attitude of hopelessness is by all

[2] THE LANCET Feb. 15th, Feb. 22nd, and March 14 h 1895.

sad experience of the evasibility of Acts of Parliament, we venture to ask for the insertion in the above clause after the figures "1898" of words to this effect "All other Acts notwithstanding" We know how completely baffled the General Medical Council has been in getting into its hands fines inflicted in the metropolitan area under the Medical Acts by reason of the competition of the Metropolitan Police Acts

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THE question of public abattoirs has often been raised in these columns We deputed a Special Commissioner to visit and describe the municipal abattoirs of Brussels about seven years ago and also the model abattoir of Anderlicht in the outskirts of Brussels Subsequently he inspected the magnificent and gigantic abattoirs of Berlin and the bacteriological laboratories attached thereto [1] We are pleased to note that the principles which should govern such institutions and which we then set forth have been recently advocated by Dr WILLIAM ARTHUR BOND at the Sanitary Institute He urges, as we have frequently urged, that when a public abattoir has been established the local authorities should have the power to prohibit slaughter in any other place It is obvious that the object of a public slaughter house is to do away with private slaughter houses Further, he proposes not only that all meat should be inspected by properly qualified inspectors, but that all the joints should be stamped and bear marks of inspection similar to post-marks on letters, so that the public may be able to verify for themselves that the meat has been examined. This practice largely prevails on the Continent and what is practicable abroad should be equally easy in England Dr BOND points out that with regard to tuberculosis the contamination is more commonly on the surface of the meat and is due to material derived from other parts of the animal rather than to disease of the meat itself If these diseased parts are promptly removed and destroyed and do not touch the actual meat substance of the carcass the danger is reduced to a minimum But such precautions cannot be taken in dark, small, overcrowded private slaughter houses We are told that, according to the records of various English and Continental abattoirs, from 40 to 50 per cent of the cows slaughtered are suffering from tuberculosis, and at Copenhagen the proportion of the swine suffering from this disease was equal to 15 3 per cent during the three years 1890-93 The disease is but little prevalent among sheep and calves Inspection, which in the face of these startling figures becomes a matter of urgent necessity, can only be effective when the organs of the animal can be adequately viewed in a good light and when kept separate from the offal of any other animals Such conditions do not prevail in private slaughter houses In them, on the contrary, the offal of several animals is thrown into a heap and in ill lighted places

It is often stated that the establishment of public slaughter-houses in London would be opposed to the interests of the butchers This Dr BOND assures us is not the case, for though there are in London some 5000 butchers only 450 of these have private slaughter houses The cost of properly inspecting these 450 private slaughter houses, scattered in all directions, would be much greater than if all the slaughtering was done in six or eight local centres Mr A E HARRIS, the medical officer of health of Islington, ably summarises the advantages to be attained He points out that private slaughter houses are a nuisance to the neighbours, that they greatly increase the foulness of sewers in residential districts, and that meat hanging in these badly constructed private slaughter houses is specially likely to be contaminated by foul emanations Financially, the fact that meat is better preserved in model public abattoirs is a great advantage to the trade and to the public Here also much of the blood and offal which are now lost can be saved and utilised Then there are the dangers to the public resulting from driving the cattle through the streets and the loss of time and the expense which are thus entailed Of course, public slaughter houses would be placed close to railway lines and water communications It has also been shown that public abattoirs, when properly managed, yield a good profit and that such institutions help in reducing the rates From the humanitarian point of view much of the cruelty which is perpetrated in private slaughter-houses and which is not seen and cannot be checked could never take place in the public slaughter house where inspectors are always present There is also much unnecessary suffering entailed in the driving of exhausted animals through the streets and the lairage in private slaughter houses is frequently unwholesome and insufficient

Dr BOND relates that at the Holborn abattoir when the inspector first entered upon his duties he seized 4000 tons of diseased meat in three months, exclusive of diseased offal A large number of offenders were fined or imprisoned; and yet for several years previously not a single conviction had been obtained This proves that the public must have consumed a large quantity of diseased meat It is thought that in London there should be at least six public abattoirs In Glasgow there are three, but in Manchester there is only one In both these towns the system has proved a financial success On the Continent the charge made is much higher than in England. In Glasgow the charge for cattle is 9*d* per head, it is 1*s* 6*d* in Manchester and Liverpool, and 1*s* in Leeds, but in Germany the charge varies from 2*s* to 5*s* Of course, as we have pointed out when describing Continental slaughter houses, these institutions should be near the cattle market and in direct connexion with the main railway lines There must be large cooling rooms, a microscopical and pathological laboratory, and proper but separate accommodation for fat-melting, bone-boiling, gut-scraping, and the extraction of the albumin from the blood Then there should be a small and separate slaughter house for the killing of diseased cattle and a destructor for diseased carcasses, such as exists at Hamburg [2]

It is difficult to see why London should have waited so long for a reform which was carried out in Brussels in the year 1836 Why should London be 63 years behind Brussels? Not only is London behind the Continent, but many of the British provincial towns are also in advance of the metropolis Is it in the power of the 450 butchers who now possess the monopoly of slaughter houses to thus compromise the

[1] THE LANCET Dec. 17th, 1892, and July 14th 1894

[2] THE LANCET, July 21st, 1894

quite recently there were sold at Messrs Puttick and Simpson's a lot of old books comprising "*inter alia* 21 old manuscript volumes of cases treated at the Women's Hospital, Soho square, by the late Dr Alfred Meadows These books contained, as a matter of course, detailed reports of all the ailments and troubles of the innumerable women treated by the doctor during a period dating back to 1873" The whole lot only fetched 3s 6d, so that the hospital might easily have bought it, but the hospital authorities are stated to have ridiculed the idea that there was anything improper in the sale of such works by public auction The Rev A. W Oxford informs us that it is the custom of the hospital to present the physicians with all their "letters" bound up at the end of every year If the hospital really does this we consider it an improper thing to do Records of hospital cases are not the property of the medical man in charge of such cases but of the charity of which he is an officer The authorities of the hospital may not have known that Dr Meadows's case books were to be sold, but his executors or whoever sold the books should never have had it in their power to do so Records of cases, unless published so as to be unidentifiable or published with the consent of the patient, should certainly be considered absolutely confidential We hope that the authorities of the hospital in question will see that such a gross breach of the trust committed to them does not occur again

SANITARY STAGNATION IN RURAL DISTRICTS

NOTWITHSTANDING Public Health Acts and Local Government Acts establishing county, district, and parish councils there has been up to the present no great awakening in the sense of sanitary reform in many of our rural districts Conditions which obtained when the Public Health Act, 1875, was passed persist at times even to-day and there would appear to be but little prospect, immediate or remote, of a better state of affairs In a word, there are numerous instances throughout the country where both central and local government have signally failed As a case in point we may perhaps take the Easingwold Rural District, the annual report concerning which has recently reached us This district is situated in the North Riding of Yorkshire and has a population of some 10,500 In 1890 the late Dr Barry of the Local Government Board inspected the district and a printed report was subsequently issued by the Board At that time the sanitary condition of the district was at a very low ebb indeed houses unfit for habitation, water from shallow wells liable to pollution, rubble drains of the rudest character, excrement disposal by means of defective privy-middens no isolation hospital, and no disinfecting apparatus Sanitary administration was practically at a standstill and such action as was taken was of a makeshift and apologetic nature Year by year the medical officer of health, Mr E. B Hicks, who is still in office has brought up the sanitary shortcomings of his district in his annual report and year by year his advice has gone unheeded. It seems indeed, that save for the water supply and drainage of the most populous village—that of Easingwold itself—and two other villages, next to nothing has been done, the state of the district being little different from that in which it was when Dr Barry made his recommendations with regard to it and this in spite of the fact that in 1891 a committee of the sanitary authority inspected certain places in the district and endorsed the recommendations of the medical officer of health It is somewhat difficult to determine the share which the several bodies responsible may be held to have in this astounding apathy as regards sanitary reform which pervades so many rural district councils at the present day The North Riding County Council does not appear in this instance at least to have brought an overwhelming amount of pressure to bear upon the Easingwold District Council, nor have the efforts of the Local Government Board, whatever they may have been, led to any very evident result Obviously not too much is to be expected from the officers of local authorities who receive a pay in no sense commensurate with their services, but the disease seems more deeply rooted than this, and it lies rather in the apathy of the members of rural district councils and in their disinclination to do anything which costs money But this disinclination to action is apparently common to county, district, and parish councils alike in cases where rural districts are concerned, and furthermore it is obviously shared by the Local Government Board itself Clearly, in these days of local government, the central health authority might find it inconvenient to put too great a pressure upon rural district councils, and indeed it would be difficult to find in either political party a President of the Local Government Board who would be allowed by his colleagues in the Cabinet to take any very drastic measures with respect to rural districts many of which are becoming rapidly reduced in population But we should withal be glad to see more attention paid to rural districts than has been the case hitherto and vigorous action taken in regard to certain of the more apathetic councils The sanitation of rural districts is not a matter which can be considered without regard to, the relations which the defective sanitation of such districts may bear to urban communities This fact will probably become more apparent in the near future now that the question of tuberculosis is attracting so much attention The dweller in towns will soon wish to know more of the sanitary condition of the rural cowsheds from which much of his milk is derived, and of the methods adopted for recognising and controlling infective disease in localities where annually he may seek with his family to recruit his health But so long as the Local Government Board have practically no control over the salaries of officers no part of whose remuneration is defrayed out of the county funds, so long will insufficient salaries be offered and, alas, accepted, and so long will the medical officer of health be at the mercy of those who care but little for sanitary reform When adequate salaries are paid and permanence of office is assured we may look for a better state of things, but a more radical change than this is necessary if our rural district councils are to awaken to a proper sense of their responsibilities

SORE-THROATS AND ISOLATION

THE position of diphtheria when recognised as such is now clearly defined and allowed for in the general scheme of medical treatment Something still remains to be done, however, in similarly defining the place of a multitude of sore throats uncertain in their source and developments but evidently infectious nevertheless M du Mesnil de Rochemont, whose paper is quoted in the *Journal de Clinique et de Thérapeutique Infantiles* of March 16th, has usefully directed attention to the wisdom of isolating for a sufficient period cases of this doubtful character In support of his argument he refers to the well known fact that in examples of throat disease clinically indistinguishable from true diphtheria careful examination has failed sometimes to detect the Löffler bacillus Nevertheless, very grave consequences, local and general, have attended their progress which has even attained an epidemic prevalence The writer states that he has himself observed such a generalisation of sore-throat in hospital practice, 18 out of 67 children being attacked He quotes the similar experience of Cardeur, Basquet and others In his opinion, which is founded on an examination of 60 cases, this infectiveness is more than apparent and is associated with

means to be avoided We may be, it is true, groping feebly along a very dark pathway, but there are, we think, indications of the light to come already visible

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THE Bill for the reform and re-arrangement of Local Government areas in London, now under the consideration of Parliament, gives additional interest to the Registrar General's annual summary which deals with the vital and mortality statistics of London and of other large towns in England and Wales during 1898 The statistics for London, while comparing favourably with those for the larger provincial towns and with those for most of the Continental cities, afford abundant evidence, if closely analysed, that the sanitary condition of some of the more crowded portions of our large metropolis leaves much to be desired and to be expected from more energetic local government The recorded death rate in the whole of London last year was 18 7 per 1000, which was one per 1000 below the average rate in the preceding 10 years 1888-97, during which the rate ranged from 21 5 in 1891 to 17 8 in 1894 After correction for differences of age and sex constitution, the same population which gave 1000 deaths in England and Wales in 1898 gave 1133 deaths in London Among the 33 towns dealt with in the Registrar General's annual summary the comparative mortality figure in 1898 was below 1000 in Croydon, Cardiff, West Ham, Portsmouth, and Brighton, ranging from 824 in Croydon to 973 in Brighton, in each of these five towns the rate of mortality last year was, after correction for age and sex differences, below the mean rate of the whole of England and Wales In five of these 33 towns this comparative mortality figure exceeded 1300, it was 1327 in Newcastle, 1351 in Sunderland, 1411 in Manchester, 1452 in Salford, and 1498 in Liverpool These figures show that among the 33 towns last year in equal numbers living, equally constituted as to age and sex, 150 deaths occurred in Liverpool and only 82 in Croydon This startling contrast between the social and sanitary condition of these two urban populations is a matter of most serious import, and the mortality statistics for the different districts within the metropolitan area show contrasts equally startling Registration or Inner London is at present divided into 43 separate sanitary areas After the distribution of the deaths recorded in public institutions to the localities from which the inmates were admitted, the death rates last year in the various sanitary areas ranged, from 11 7 per 1000 in Hampstead, 13 2 in St George Hanover square, and 13 7 in Fulham, to 23 8 in Limehouse, 24 4 in St George the Martyr Southwark, 24 8 in St George in the East, 24 9 in Holborn, and 25 7 in St Luke It should not be overlooked that the rates in Hampstead, St George Hanover square, and Fulham are understated through the abnormal proportion of domestic servants included in those populations, but after due allowance for this disturbing factor these widely divergent rates undoubtedly indicate a disastrous loss of health and life in many of the more crowded central districts of London If the health condition of these sanitary areas be tested by the proportions of infant mortality measured by the number of deaths under one year of age to 1000 births, very similar conclusions must be accepted This proportion of infant mortality, which was 108 in Stoke Newington, 120 in St George Hanover square, and 125 in Hampstead, rose in the other sanitary areas to 208 in Limehouse, 211 in St Saviour Southwark, and 221 in Holborn Thus the infant born in Holborn has less than half the chance of living through its first year of life than has the infant born in Stoke Newington This waste of infant life has undoubtedly close relation to overcrowding in more or less insanitary tenements and can only be reduced by strict and constant enforcement of the provisions of the Public Health Acts by medical officers of health and by efficient sanitary inspectors The apathy of many of the present London sanitary authorities in health matters is proverbial and we confidently look forward to the new Local Government Bill for London as a means of initiating a marked acceleration and increase of interest in sanitary progress within the county of London

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Annotations.

"Ne quid nimis."

FRIENDLY SOCIETIES AND THE MEDICAL PROFESSION

ON April 3rd the twentieth annual conference of the Friendly Societies Medical Alliance was held in the Assembly Rooms at Leamington Alderman T S Harvey of Leamington presided and in his inaugural address is reported (we quote from the *Times*) as saying that it was a matter for regret that in certain towns there still existed hostility to the objects and aims of friendly societies medical associations on the part of the medical profession Meetings had been held between representatives of the General Medical Council and the leading friendly societies of the country with a view to bringing about mutual settlements of disputes They must be careful to limit their attendance to *bonâ fide* members of friendly societies for medical men had every right to object to their medical associations going about touting for patients outside the ranks of friendly societies But the medical profession would have to concede the right—not the privilege but the right—of the principal friendly societies to make combined provision for all their members altogether apart from their social position They would strenuously resist any claim put forward by the medical profession to impose any wage limit to membership. If these are the views of the medical associations in general we cannot congratulate them on their wisdom It is all a part of the modern craze for cheapness which is ruining everything Just as goods made by sweaters, whether clothing, furniture, or anything else, are shoddy and rotten, so sweated medical attendance will naturally be careless and inferior Good workmen nowadays, whether they work with their heads or with their hands, must be paid well if they are to be kept and sensible employers are finding this out The friendly societies will have to learn this lesson and the Battle of the Clubs is by no means over yet Respectable and conscientious medical men are getting more and more unwilling to attend friendly societies and this state of matters will continue until some steps are taken to limit the membership of such societies to those who are really needy

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THE SALE OF HOSPITAL CASE BOOKS

A STATEMENT appears in *Truth* of March 30th which if correct reflects very gravely upon the management of the Hospital for Women, Soho-square It is to the effect that

which includes all qualifications not considered up to the standard required for assistant surgeons The scheme of aiding ladies of the assistant surgeon class to obtain the higher qualifications in medicine has been found to work satisfactorily The students at present in the principal medical colleges and schools in India comprise 83 European and native ladies training as assistant surgeons, 116 as hospital assistants, and 125 in the midwifery, nursing and compounding classes Lady Elgin has every confidence that the association will continue to prosper under Lady Curzon's guidance Surgeon General J Cleghorn who joined the committee of the association in 1892 has recently retired from India and his place has been taken by Surgeon General R. Harvey, his successor as Director-General of the Indian Medical Service

VOLUNTARY LATERAL NYSTAGMUS

IN the *Journal of the American Medical Association* of March 4th, 1899, Dr William E Gamble has published the case of a medical student aged 24 years, who possessed this very rare power He had had no severe illness since childhood and had not had scarlet fever or diphtheria Whilst attending school at the age of 15 years he discovered that he could produce at will lateral nystagmus, it was never involuntary He had no difficulty in beginning, but he could maintain the movement only for less than a minute owing to exhaustion He could not produce it in one eye alone The vision in each eye equalled $\frac{20}{20}$ Dr Noyes in his "Diseases of the Eye" says that he has seen but one case of voluntary nystagmus, the patient acquired the movement after having been confined to his room for some weeks with eye trouble

REPORT OF THE HEAD CONSTABLE OF LIVERPOOL FOR 1898

THE number of apprehensions for drunkenness in Liverpool during the year 1898 was 4292, including 1361 females In the year 1883, or 10 years ago, there were 15 628 arrests for a similar offence, which shows a remarkable improvement in the morals of Liverpool There were 353 prosecutions of parents or guardians for wilfully neglecting, ill treating or exposing children, resulting in 229 convictions with various terms of imprisonment. The number of constables, &c, holding certificates from the St John Ambulance Association was 1396 The number of cases in which first aid was rendered by the police was as follows artificial respiration, 13, applying tourniquets, 26, applying splints, 195, applying bandages, 342, and administering emetics, 21 Other first aid, 97 The police also rendered assistance other than first-aid to 3603 persons in cases of accident or sudden illness by removing them to hospital, &c making a total of 4302 persons assisted, 39 rescues from fire or drowning being included in this number Instruction classes in connexion with the Life-Saving Society have been recently formed and as a result of the first examination 54 constables, &c. have received certificates from the society The new police horse ambulance system came into operation on April 25th last and there are now six fully-equipped ambulances stationed as follows Royal Infirmary Royal Southern Hospital, Northern Hospital, Stanley Hospital, Central Fire Station (for night service), and Old Swan Police station (for outlying districts) The number of turns out from April 25th to Dec 31st was 1173 The number of persons committed for trial at the assizes was for murder (of persons aged above one year), two males and one female, manslaughter, five males and one female, wounding and other acts endangering life (felony), 38 males and two females, malicious wounds and other like offences (misdemeanours), 20 males and seven females, rape, one, indecent assaults on females, one, unnatural offences, two, indecency with males, one male, defilement of girls under thirteen years of age (Criminal Law Amendment Act, 1885, Section 4), three males, defilement of girls under sixteen years of age (Criminal Law Amendment Act, 1885, Section 5), three males, concealment of birth, one female 117 persons were bitten by dogs, 381 persons were run over by carts; and there were 165 attempts to commit suicide

TYPHUS FEVER

THE report by Dr Waldo on Typhus Fever in London which we print this week presents several features of interest The ravages which were inflicted by typhus fever in bygone years can hardly be appreciated at the present time and the disease affords an excellent example of the effect of modern sanitation on what is literally a filth disease It is, however, very infectious, although close contact with the afflicted person is essential as the poison becomes concentrated around the sick Hence it is that medical men and nurses are so frequently attacked This point is well brought out in Dr Waldo's report, one man being responsible for the spread of the malady It will be seen that he refused to enter the "reception house" with the rest of the family, had he done so the centre of original infection would have been entirely stamped out This affords a useful lesson to the advocates of the prevention of small pox by isolation rather than by vaccination Such a proposition is all very well in theory but presents enormous difficulties in practice, as has frequently been pointed out, one of the chief being the question as to how to ensure the quarantine of those persons known to have been exposed to infection The "liberty of the subject" is so ingrained in Englishmen that it would prove a hard matter to induce anyone to enter and remain in a "reception house" against his will The evils of non-compliance with such a request are well shown in Dr Waldo's report and might have led to far more serious consequences than were actually experienced

LOCK HOSPITALS AND LOCK WARDS

IN a letter published in THE LANCET of April 1st Mr F W Lowndes drew attention to the fact that one of the only six lock hospitals in the kingdom has been closed From one point of view this might perhaps be considered a good thing, for a special ward for syphilis in a general hospital is a far better way of treating this only too common and disastrous complaint. To have been a patient in a lock hospital does not exactly serve as a certificate of good conduct and therefore in our estimation the establishment of a lock ward in a general hospital is more in accordance with true charity But the closing of the Liverpool Lock Hospital acts with peculiar hardship, for it is a fact, though one hard to be believed, that in all Liverpool not one general hospital other than the workhouse infirmary will receive a person suffering from syphilis as an in patient. So now, owing to the closure of the Lock Hospital, the only refuge for the syphilitic is the workhouse We cannot think that a city like Liverpool, which is wealthy, and which has a large Roman Catholic as well as Protestant population, can possibly continue in a course of action so absolutely opposed to the teachings of Christianity Granted that syphilis is a form of disease often, though by no means always, acquired through irregular sexual intercourse, that is surely no reason why the sufferers from it should be treated as outside the pale A separate ward is a necessity on account of the need for guarding against infection, but there is no reason why a general hospital should not set aside one ward at least for the reception of such patients Some of the metropolitan hospitals do so and why should not others? If it be impossible to re-open the Lock Hospital—and we trust even now

the presence of the staphylococcus or the streptococcus, one or other of which is commonly found on the fauces The conclusion he arrives at is that isolation should form part of the routine treatment of inflamed sore throat. These observations, it is true, are not entirely new, nor indeed is the conclusion which is founded upon them It has long been one of the axioms of careful practice, at least as regards tonsillitis, that this disease ought to be isolated until its true relation to diphtheria or scarlet fever is made out. We are probably right in regarding the isolation of cases of sore throat not related to either of these diseases as a matter of somewhat less importance At the same time it cannot be denied that many such are attributable to the activity of morbid germs and are therefore possessed of a greater or less infective power There is much to be said therefore for the view that cases of inflamed throat which are not accounted for by mere atmospheric changes should be treated in seclusion

THE DIFFICULTY OF LOCALISING PULMONARY LESIONS

AT the meeting of the Société Médicale des Hôpitaux on Jan 27th M Tuffier read a paper on this very important subject At the Moscow meeting of the International Medical Congress he analysed all the accessible cases (306) of pulmonary surgery This prolonged study impressed one thing on him that difficulties lay much more in insufficiency of diagnosis and in defective localisation than in operative technique 17 cases of pneumotomy which he performed confirmed this opinion To attack a pulmonary disease efficaciously its position and extent as well as its unity or multiplicity should be known Of 221 cases diagnosis was incomplete in 45, in his own 17 cases an error was committed in seven although the patients had been examined by one or several of his most distinguished colleagues If an error of diagnosis was of minor importance in abdominal it was of capital importance in pulmonary surgery Hepatic abscess could be distinguished from purulent pleurisy only with difficulty M Tuffier had operated on a case of non suppurating hydatid cyst supposed by a great number of his colleagues to be situated in the liver but which he found to be entirely in the lower lobe of the right lung It was necessary that the height and depth of a pulmonary lesion should be defined In a case of hydatids the stethoscopic signs were supposed certainly to show the presence of a lesion in the upper two-thirds of the lung, but the cyst, as large as the fœtal head and packed with living echinococci, filled the lower lobe alone Radiography revealed no opacity in this position In a case of gangrene the centre of the lesion was localised in the eighth intercostal space, the inferior extremity was found in the seventh This error though small had entailed dangerous explorations The depth of the lesion was still more difficult to define M Tuffier had operated on two patients in whom auscultation revealed cavities so superficial that pyo pneumothorax was diagnosed without reserve He had to penetrate more than a finger's breadth of lung to reach a pulmonary cavity The mistake appeared to have been inevitable, the lung was indurated, lardaceous, and adherent to the chest wall Such errors were not peculiar to his countrymen In foreign literature he had collected 10 examples in the case of pulmonary gangrene alone In THE LANCET of Jan 13th, 1894 (p 87), Priestley Leech had recorded a case where multiple punctures failed to discover an abscess complicated by gangrene Quincke[1] opened one cavity but the necropsy showed several The extent of the cavity was still more difficult to determine—a small cavity might simulate an enormous one The diagnosis was especially difficult in bronchiectasis, where a series of small suppurating excavations would cause the same symptoms as would be caused by a large cavity In one case the diagnosis was septicæmia consecutive to a vast superficial pulmonary excavation at the anterior part of the lower left lobe The incision showed several small cavities of the size of a walnut If auscultation was powerless, so equally was puncture The form of expectoration might lose its significance, especially in children in whom the thorax was supple and all the bronchi could be emptied by a single effort thus simulating the evacuation of a single cavity The number of foci was of capital importance but nothing was more difficult to ascertain A man had abundant fœtid expectoration A focus of the size of the fist was opened by pneumotomy The presence of a second focus was diagnosed as blood did not escape by the mouth whilst it escaped abundantly from the wound. Progress was made for a time but the septic symptoms reappeared Though assured of the existence of a second focus search was in vain The patient died and a second cavity was found a little over an inch above the first in the midst of sclerosed tissue Most errors had been made in reference to lesions of the inferior pulmonary lobe, they were much rarer at the apex M Tuffier did not mean to attack medical diagnosis, on the contrary he found that it was usually exact and that error was exceptional Radiography would no doubt prove of great value in the problem of localisation

[1] Mittellungen aus den Grenzgebieten der Medicin und Chirurgie, 1895, vol i, p. 15, obs vi.

THE INTERNATIONAL CONFERENCE UPON SYPHILIS

AN International Conference upon the subject of the Prophylaxis of Syphilis and Venereal Diseases will be held in Brussels in September next The secretary, Dr. Dubois Havenith, has sent us a letter in which he expresses the opinion that medical men practising in the British Empire could render a great service to the conference by sending in a detailed report of the results of the absolutely free traffic in venereal disease which obtains throughout the United Kingdom and most of the rest of the empire A very complete programme of subjects for discussion has been drawn up and a set of questions printed on a regular form which, if carefully filled up, should afford good grounds for coming to a definite conclusion on the subject in hand Dr Dubois Havenith's address is 19, rue de Gouvernement Provisoire, Brussels

THE COUNTESS OF DUFFERIN'S FUND

THE fourteenth annual report of the National Association for Supplying Female Medical Aid to the Women of India shows that the year 1898 has been marked by good progress in carrying out the objects of the association During the past five years the Countess of Elgin has presided over the fund and an encouraging advance has been made in every direction, many new hospitals have been erected, the number of patients treated, including *purdah nashin* women, has steadily increased, and every possible facility has been offered to female students who wish to adopt a medical career The total number of patients treated in zenana hospitals, wards, and dispensaries throughout the country was 1,484,967, of whom 30,598 were in patients, 1,419,145 were out-patients, and 35,224 were visited at home The staff employed in the various hospitals for women throughout India include 35 lady medical practitioners of the first grade—i e, persons qualified for registration in the United Kingdom—75 assistant surgeons or practitioners of the second grade who have been trained in India and who hold Indian appointments, and 257 hospital assistants or practitioners of the third grade

The crossed and direct pyramidal tracts were much degenerated and yet intermingled with degenerated fibres were many normal ones The antero-lateral columns also showed some sclerosis The posterior columns of Goll showed moderate diffuse sclerosis, but Marchi's method revealed no recent degeneration The degeneration of the pyramids was less distinct towards the medulla and it practically ceased at the pons The cells of Clarke s column were normal The posterior nucleus of the vagus had many cells showing great and even extreme pigmentary degeneration, the facial, hypoglossal, and "ambiguous" nuclei showed only a few degenerated cells "Amyloid" bodies of varying sizes were present in the grey floor of the fourth ventricle Portions of the biceps, tongue, and thigh with carmine staining and with Marchi's method showed no disease or degeneration The larynx (crico-arytenoid posticus muscle) showed small patches of interstitial myositis with nuclear hyperplasia in these patches The cerebral cortex (paracentral lobule) appeared normal and the white subcortical substance showed (with Marchi s method) no degenerated fibres Sections of the cerebral peduncles and pons showed (with Weigert's method) no degeneration of fibres The viscera of the thorax and abdomen were normal (except the bladder which was injured quite late in the course of the disease by catheterisation while in a state of paralytic distension) The lesions of the spinal cord agree with those described and figured by Déjerine and Sottas[3] and with cases recorded by Brissaud, Oppenheim, and others The discussion of the facts points, on the whole, to a vindication of the views of Charcot on the nature and localisation of the spinal lesions in this disease.

SALT FISH

AT the present time salt fish can hardly be said to be a popular article of diet with the majority of English people, but perhaps there are few who do not take it at least twice a year It seems rather curious to look back to the time when salt fish was considered of sufficient importance to engage the attention of Parliament It happened, however, in the thirty first year of the reign of Edward III that complaint was made to the king by the Commons of this realm of England that the salt fish of Blakeney was at such a price ("a trop chier et excessif pris") that the people were much prejudiced thereby The king, with the assent of the prelates and other great men and the Commons, ordained and established rules with regard to the sale of this fish that the ships called 'doggers and lode ships" which belonged to Blakeney Haven and to the adjacent coast should land all their fish at Blakeney between certain points The punishments for breaking this law were imprisonment at the king's pleasure and forfeiture The places on the adjoining coast which were affected by the law were Shiringham, Crowmer, Clay, and Suyterley The fish which were affected by the statute were "orgeys" and "loych fish '—meaning lob, ling, and cod At even an earlier date than this regulations had been made with regard to the price charged for Yarmouth herrings, so that complaint as to the price charged in London for fish is by no means of recent date

SERUM TREATMENT OF ANTHRAX.

IN the *Gazzetta degli Ospedali* of March 19th Dr F Abba and Dr G Piccardi of Turin give details of a case of anthrax pustule successfully treated by means of Professor Sclavo s anti anthrax serum The patient, a youth 17 years of age, on Feb 26th discovered in front of his right ear a small pustule which increased in size during the two following days, the surrounding area at the same time becoming swollen and red On March 1st, when the medical men first saw him, the pustule had an irregular blackish surface and was surrounded by vesicles the fluid of which contained numerous bacilli similar to those of anthrax, the whole right side of the face was greatly swollen, the evening temperature was 38 6° C (101 4° F) That evening the patient received a subcutaneous injection of 22 cubic centimetres of the anti anthrax serum. On the morning of March 2nd the œdema was increased, the eye was completely closed, and much fluid had escaped from the vesicles during the night, the temperature, however, had fallen to 37 5° C A second injection of 11 cubic centimetres of the serum was given In the afternoon the patient was free from fever and the eyelids were beginning to open On the morning of March 3rd the swelling was limited to the cheek and to the external corner of the eye and the case rapidly went on to recovery The diagnosis of anthrax was confirmed by inoculations made on guinea pigs, the animals dying in from 36 to 48 hours It was found that when guinea pigs were inoculated with fluid collected from the vesicles 10 hours after the first injection of the anti anthrax serum they survived from seven to eight hours longer than those which had been inoculated with fluid collected before the beginning of the treatment, whilst fluid collected 34 hours after the beginning of the treatment did not cause death This one is said to be the twenty-seventh case of anthrax which has been successfully treated with Professor Sclavo's serum

THE ATTORNEY-GENERAL OF THE ISLE OF MAN ON THE MEDICAL ACT

THE Medical Bill for the Isle of Man has been read a third time and passed As we said last week it follows slavishly in the lines of the English Acts On the second reading the Attorney General, while maintaining that the Bill was an advance towards proper legislation, admitted that it was by no means a satisfactory measure We reproduce some of his remarks, which are creditable to his judgment and may be useful for the guidance of our own legislators The Attorney-General said "The great difficulty in the Act which governs England at present and which this Bill will be like is that it does not prohibit the practising of quacks There is nothing to make it illegal for any person however wanting in qualification to practise" He further said "My own opinion, formed after careful consideration of the subject and backed up by the medical profession, is that the proper law would be to make it illegal to practise" The Attorney General is right He knows that in legal business, which is chiefly concerned with property, qualification is essential to practise, and that life being more valuable than property should receive greater instead of less protection at the hands of the law

ALLEGED NEGLECT AT THE WOKING COTTAGE HOSPITAL.

ON March 25th Mr G F Roumieu held an inquest upon the body of Henry Owen, aged 53 years, who had died in the Woking Cottage Hospital. The inquest was held owing to the deceased's son having complained to the police of the treatment which his father had received while in the hospital The son gave evidence that he had seen his father in the hospital and that his father had complained that he was not properly attended to He believed that this was so but he did not mention it at the time to any of the hospital authorities All the deceased's relatives came and went as they liked and the witness s mother stayed several nights at the hospital The witness did not feel any gratitude to the hospital and he believed that his father was left for hours without attention The death certificate gave as the primary cause of death septic extravasation of urine and the secondary cause as

Archives de Physiologie, July 1896.

it is not too late to take this step—for the sake of humanity alone let one general hospital at least take pity upon those sorely afflicted and by so doing affect for good the health of possibly many generations to come

THE CHEMISTRY OF SAUSAGES

THE composition of the sausage is not only complex but it is often obscure In this country the preparation of this (as it should be) useful article of food is confined to the employment of minced beef and pork The only exception probably is the so-called "black pudding" which is made with pig's blood and perhaps some heart and kidney Abroad, however, the sausage is compounded of a much wider range of substances These include brains, liver, and horseflesh The last substance is generally considered repugnant, while of course it is fraudulent to sell sausages as beef or pork containing horseflesh Occasionally, however, sausages do not contain meat at all but only bread tinged with red oxide of iron and mixed with a varying proportion of fat The remarkable feature of horseflesh is the high proportion of glycogen which it contains, and this fact enables the presence of horseflesh to be detected with some amount of certainty The test which depends on a colour reaction with iodine has recently been more carefully studied and with more satisfactory results, so that the presence of 5 per cent of horseflesh in sausages can be detected At present there is no legal provision for a standard in regard to the composition of sausages, but clearly there ought to be Limitations should be laid down as to the amount of bread used, as to the actual proportion of meat substances present, and as to the colouring matters added to give an attractive appearance of fresh meat Sausages are extremely liable to undergo decomposition and become poisonous owing to the elaboration of toxic substances during the putrefactive process Bad or rancid fat is very liable to alter the character of a sausage for the worse Thus in some instances the use of bad or rancid lard has rendered the sausage after a time quite phosphorescent, an appearance which indicates, of course, an undesirable change The smoked sausage is a much safer article of diet than the unsmoked sausage, since the curing process preserves the meat substances against decomposition by reason of the empyreumatic bodies present in the wood smoke which is used for this purpose

MEMORIAL STATUE OF SIR THOMAS BROWNE

FOREMOST among the names of literary eminence and philosophy associated with Norwich is that of Sir Thomas Browne, M D, who resided there for 46 years and who died and was buried in the church of St Peter Mancroft of that city in 1682 It was there that he wrote his chief works—the "Religio Medici," "Christian Morals," "Vulgar Errors," and "Urn Burial"—the first and last of which have not only obtained a permanent place in literature but have been regarded with a growing appreciation extending up to the present time It is fitting, therefore, that Norwich should be the place of any statue to be erected to his memory and in recognition of the distinguished position which his works have occupied, and will continue to occupy so long as great thoughts, learning, and a charming literary style command attention or constitute a claim on our admiration Although Norwich was the scene of Sir Thomas Browne's life and labours his reputation and his works belong to the world The author of "Religio Medici" was a great and good man well deserving of being honoured The committee constituted for the purpose of perpetuating the memory of their distinguished citizen have very naturally made their first appeal to the inhabitants of Norwich and its neighbourhood, but they consider that as the interest and gratification derived from Sir Thomas Browne's writings have never been circumscribed within any local limits so all who have admired and benefited by them have a right to participate in the privilege of honouring his memory A very strong and representative committee, of which Sir Peter Eade, M D, is the chairman, has been already appointed and has inaugurated a movement for erecting a statue to Sir Thomas Browne in the city with which he was so long associated, and there can, we think, be little doubt that a memorial worthy of his name and reputation will be the result of their action Sir Thomas Browne has special claims on the medical profession, for he was a leading physician in his day, but it was notably as a moral philosopher, naturalist, and charming writer that he shed lustre on the profession to which he belonged

CHELSEA CLINICAL SOCIETY

TWO special meetings of this society open to all members of the medical profession are to be held (by kind permission of the director) at the Jenner Institute of Preventive Medicine, Chelsea gardens, S W, on Tuesday, April 18th, and Tuesday, April 25th, at 8.30 P M The subjects of discussion will be Recent Investigations relating to the Etiology, Prevention, and Treatment of Tuberculosis The following is the proposed order of the proceedings On Tuesday, April 18th, the Bacteriology and Pathology of Tuberculosis will be treated by Professor Sims Woodhead, Professor Sidney Martin, and Professor Watson Cheyne On Tuesday, April 25th, Dr C Theodore Williams will speak on Preventive and Climatic Treatment, Dr J Edmund Squire on General Preventive Treatment, Dr R Maguire and Dr S H Habershon on General Treatment, and Dr F R. Walters on Sanatoria

AMYOTROPHIC LATERAL SCLEROSIS

THIS disease has been known since about 1861 and Collins in 1898[1] succeeded in finding 72 cases with necropsies recorded up to that date Dercum reports the following case of interest in which the necropsy was carried out in an exceptionally full manner[2] A man, aged 53 years, had suffered for six months from pain in both legs below the knees, followed by an undue feeling of weariness in the legs after walking On admission to hospital there was moderate spasticity with increase of reflexes He could now walk only with the aid of crutches He lost the power of whistling, the speech gradually became indistinct, and the spasticity progressed and finally involved the arms At this stage he was quite bedridden The feet swelled and eventually eczema rubrum developed in both legs Bed sores were formed on the elbows, the heels, and the sacrum, but after treatment the general health improved and the sores disappeared The feet were in a position of extreme extension, the knees and ankles were rigid, the knee jerks were much increased, and the muscles of the leg were firm but generally wasted The upper limbs were similarly involved but to a less degree There was no cutaneous anæsthesia At a later stage paresis of the muscles of deglutition supervened, the general condition again became one of feebleness and prostration, there was paralysis of the sphincters, and finally there appeared hæmaturia and gradual cardiac failure, ending in death At the necropsy the arteries were found to be generally sclerotic The spinal cord seemed normal to the eye Microscopic sections (prepared with thionin) showed considerable atrophy of the anterior cornual cells and in many this seemed to be of the pigmentary type—"occasionally a mass of pigment is all that remains of what was a cell" The anterior spinal roots were slightly atrophied Other cells (in the posterior cornu and intermediate region) were normal and so were the posterior roots

[1] American Journal of the Medical Sciences, vol cxi p 660.
[2] Journal of Nervous and Mental Disease, February, 1899.

to exist in the interior of the cell—a reticular structure that is so distinctive as to enable it to be easily recognised even when seen only in a small segment of a cell It consists of flattened fibres, rendered brown by the action of the above mentioned reagents, which unite in nodal points These nodes appear to be small discs of circular form and with transparent centre The filaments near the periphery seem to be upon the same plane, but nearer the centre they dip in all directions into the cell substance, peripherically they terminate in pyriform swellings from which again very fine filaments proceed towards the periphery The specimens should be kept in glycerine Professor Golgi considers that the presence of the external continuous or reticulated investment of the nerve cell is opposed to the view that nerve impulses are propagated by contiguity since it would act as an insulator Professor Golgi is unable to suggest any purpose in the reticular structure which he has discovered in the cell plasm

WE are requested by the honorary secretary of the Jenner Society (Dr Bond of Gloucester) to ask any of our readers practising in localities in which the agitation against vaccination may be acute either in the form of newspaper correspondence or of impending lectures or debates, to be good enough to communicate with him If newspapers are sent with reports the article to which it is desired to call attention should be marked

THE spring meeting of the Medico-Psychological Association, South-Western Division, will be held at the Grand Pump Room Hotel, Bath, on April 18th, at 2 45 P M After the election of new members, and the transaction of other business, communications on Hallucinations of the Olfactory Sense, the Incidence of Alcoholism to Insanity, &c, and Cases of Major Operations on the Insane will be read

MR. JERRARD of Regent street, W, has published an interesting picture, 18 inches by 15 inches, of the staff of Guy's Hospital The grouping is very well arranged in the board room and the portraits are most satisfactory

THE death is announced at the age of 73 years of Dr William Squire, M D St And, F.R C.P Lond, consulting physician to the St. George s Hanover square Dispensary

WE are informed that the Long Vacation classes of the Cambridge Medical School will be held as usual this year

TYPHOID FEVER AT PHILADELPHIA

ONE of the largest and most important cities of the United States is to-day in no enviable position Since Jan 1st, 1899, and up to March 24th there have been no less than 4880 cases of typhoid fever, resulting so far in 490 deaths, in Philadelphia This is not only a material disaster, it is a moral disgrace, for there is a general consensus of opinion which blames the local authorities and attributes the epidemic to their gross neglect of obvious duty Typhoid fever is endemic in Philadelphia, but it has now assumed the epidemic form According to the *New York Medical News* there has been an annual average of nearly 8000 cases of typhoid fever and over 500 deaths from this disease in Philadelphia during the last ten years This paper adds "The present state of affairs is a blot upon civilisation, a crying shame in the face of the world No Philadelphian should presume to raise his voice on any question of general interest and importance while the city in which he lives is under this awful cloud" The state of affairs, the writer insists, has during the last fifteen years "grown worse not better" The *Philadelphia Medical Journal* adds, "And yet councils sit meekly by and let the carnage go on The largest number of cases and of deaths comes from portions of the city supplied from reservoirs by practically direct pumpage. But the lesson seems to be lost on our City Fathers, although clear enough for the mind of any schoolchild—Philadelphia's most immediate need is filtered water"

The present epidemic is not the first warning which has been given In 1876 there was a widesprend epidemic of typhoid fever which caused 761 deaths On that occasion—that is to say, so far back as 23 years—the impurity of the water-supply was strenuously denounced The area covered by the Centennial Exhibition and the numerous surrounding hotels and boarding houses were drained into the river Schuylkill, and the river water, though thus contaminated, was pumped through the service mains to all parts of the city In the following year (1877), however, there was no epidemic, though there were still many deaths from typhoid fever The general death rate had been 22 88 per 1000 in 1876 and was only 18 81 per 1000 in 1877, The decrease in the deaths due to typhoid fever continued in the years 1878, 1879, and 1880, but there was a recrudescence in 1881 when 645 deaths were attributed to this disease The endemic character of this high death rate is proved by the fact that there were not less than 600 deaths per annum from typhoid fever during the six years from 1881 to 1887 In 1888 the disease became still more general and 785 persons died from typhoid fever This occasioned some alarm and the authorities then made elaborate investigations as to the cause The prevalence of typhoid fever was at that time attributed to water pumped from the Delaware river The intake of the pumping station at Otis street wharf was close to the outfall into the river of the Cohocksink sewer It was therefore decided not to use this pump any more and then the prevalence of typhoid fever abated. Later the pumps were again set in action, but as this at once produced a return of the fever the waterworks at Otis-street were definitively abandoned In 1889 when the Otis street supply was used during a part of the year there were 736 deaths from typhoid fever In 1890 there were 686 deaths from this disease, 440 in 1892, 456 in 1893, 370 in 1894, 469 in 1895, 402 in 1896, 401 in 1897, and 639 in 1898. Of the latter, it is stated that 73 per cent, were soldiers who had contracted the disease in Southern camps and were brought to the hospitals of Philadelphia during the months of August, September, and October, 1898 It would be interesting to know whether the dejecta from these soldiers were properly destroyed or whether they were drained away into the river which supplies Philadelphia with its drinking water In any case this river is evidently highly contaminated

Dr George Woodward, as a member of the Board of Health, has recently investigated the sources of pollution of the Schuylkill river He says that thousands of notices have been sent to householders advising them to boil their water, but adds that, though it is very proper that people should know of the deplorable condition of the water furnished to them, yet he does not think it right to refer to the Schuylkill river as an open sewer This latter assertion is not, however, borne out by the details given in Dr Woodward's report At most it only amounts to this, that in certain portions of the river the water seems to be fairly clear Thus a sample taken from Mill Creek, below Rosemont, was clear, odourless, and looked like good drinking water When, however, the analyst of the board, Mr William C Robinson, examined this sample he found that it contained sewage material in active decomposition At West Conshohocken another sample was taken from Gulf Creek It is described as turbid and smelt of waste water from woollen mills It contained so large a quantity of albuminoid ammonia as to be totally unfit for drinking purposes. The same results were obtained on analysing samples from Saw Mill Creek, Norristown, and opposite, at Bridgeport the water had a black soapy scum on its surface A canal which runs through the town and into the river is lined with stables and manure heaps and receives the waste water from many mills All along the river hundreds of mills drain their poisonous dyes and refuse into the water These are situated at Reading, Pottstown Birdsboro', Port Providence, Phœnixville, Royersford, Spring City, and other places This ruthless contamination of the water is not, however, the only grievance—the supply is also

cardiac failure The witness was not satisfied with the certificate, although he had nothing to complain of in Mr Phipps's treatment of his father The widow of the deceased gave similar evidence The nurse and the matron gave evidence to the effect that the patient was never left alone for hours The coroner made some very strong observations about the freedom with which visitors were allowed at all hours, and the jury returned a verdict in accordance with the medical evidence and they entirely exonerated the hospital authorities from all blame We do not doubt in the least that the deceased thought that he was neglected or that the relatives believed the statement But everybody knows that patients suffering from extravasation of urine very commonly suffer from delusions, those ignorant of such matters may very well believe statements made in this way It is to be hoped that this occurrence will not, as the coroner remarked, raise a prejudice against the hospital, for cottage hospitals are a great boon to rural districts

THE MELTING POINT OF FATS

IT is well known that the melting point of a fat under examination affords a useful guide to the elucidation of its nature and probable origin Thus the determination of the melting point of fat is important in making an analysis of substances intended for food The different fats used as articles of food have a wide range of melting point. Butter has a low melting point, while the melting point of suet is comparatively high The simplest way of ascertaining the melting point of a given fat is to place some of the solid fat on a loop of platinum wire and then to immerse it in cold water, next to gradually raise the temperature and note that point at which the fat becomes translucent The process may be reversed and the point noted at which it becomes opaque again The method is not exact, the accuracy of the observation depending largely upon that personal element which enters into a good deal of analytical work A more exact method has been recently proposed which seems easy of manipulation and which should give concordant results Two platinum wires are coated with the fat under examination and then dipped into a cup containing mercury and connected with a battery in the circuit of which an electric bell is placed The mercury is then gradually warmed, the temperature being noted by means of a thermometer immersed in the fluid metal A point arrives at which the fat will be melted on the platinum wires and the platinum gaining contact with the mercury an electric current is established which is indicated by the ringing of the bell The reading of the thermometer is then observed The process is very ingenious and it should be a valuable aid in the discrimination of fats and in affording a clue as to the probable nature of a fat in a given food under analysis

THE MEDICAL DEFENCE UNION

"A YEAR'S Work in Medical Defence" is the title of the annual report and statement of accounts for the year 1898 of the Medical Defence Union—a society which is doing most useful work A perusal of the report will give some idea of the enormous number of cases considered by the Council of the Union during the year The work of the Union not only consists in defending its members from charges of various kinds brought against them during the year, but also in prosecuting unqualified practitioners and in other ways assisting in maintaining the status of the medical profession generally The Council also had to deal with certain cases of undoubted personation—that is to say cases in which an unqualified person has assumed the name and qualifications of a qualified practitioner The Nugent case was an example of the kind In many important cases also the representatives of the Union have rendered great aid to the Treasury in criminal prosecutions, and this assistance has been duly recognised and appreciated. Medical men are at all times liable to have attacks made upon them It is a very serious matter for a member of the profession when served with a writ claiming damages for alleged malpraxis or presumed negligence to have to defend himself, but with the full resources of the Union to aid him and with the skilled assistance provided for him as a member the anxiety is lessened considerably and the cost becomes comparatively trivial Assuming that a member has claimed the aid of the Union and has had his case accepted he practically has no further trouble to meet until, should the case go for trial, he has to give evidence upon his own behalf In every case taken over by the Council the best legal assistance is given and where necessary leading counsel are instructed As stated in the report the members feel that no case is lost either by want of care or by the non employment of skilled legal advice It has become well recognised that the Union never under any circumstances compromises any action undertaken on behalf of a member which involves his professional honour or reputation and this wholesome principle has told its tale with marked effect upon reckless and blackmailing litigants and their advisers The mere receipt of a letter from the general secretary indicating that the medical man threatened was "a member of the Medical Defence Union" has in itself been sufficient to effectually put a stop to any further threat or proceedings There are several reasons therefore why it is advisable for a medical man to join this or some kindred association, both from purely personal and from general professional standpoints, he may find such a course useful in defending himself from an unjustifiable attack and he will also aid in maintaining the honour and integrity of his profession

THE STRUCTURE OF NERVE CELLS

IN an article published in a recent number of the *Archives Italiennes de Biologie* Professor C Golgi gives the results of some observations which he has made upon the structure of nerve In the first place, by the action of certain reagents he believes that he is able to demonstrate the presence of a special investing membrane in various nerve cells and, secondly, that he is able to show that there is a peculiar reticular structure in the interior of nerve cells The methods which he has adopted in making the preparations are the well known chromo argentic method and more particularly a mode of rapidly hardening small fragments of nerve tissue in a mixture of two or three parts of a 3 per cent solution of potassium bichromate and one part of a 1 per cent. solution of osmic acid and then exposing them for a short time to dilute solution of nitrate of silver (0 75 to 1 per cent) The addition of a 10 per cent solution of phosphate of soda to the osmic bichromic solution is advantageous and the fragments can be allowed to remain in this fluid for some days Sections should be made from time to time to see the effect produced The cell covering that can be demonstrated by these means is sometimes continuous and homogeneous and sometimes it appears in the form of delicate scales disposed side by side, more frequently, however, it presents the appearance of a fine and delicate network, with uniformly round and regular meshes which completely invests the cell body and is prolonged upon the protoplasmic processes of the cell as far as to the second and even the third division, but on these it becomes a more continuous and homogeneous layer The scale like and striated characters of the investment are particularly observable on the cells of Purkinje in the cerebellum The second structure to which Professor Golgi draws attention is a delicate network which he shows—

notified as enteric fever on Feb. 11th, admitted to Guy's Hospital, found later to have typhus fever and sent to the South-Eastern Fever Hospital.

F——'s son was notified enteric fever on Feb 15th, sent to Guy's Hospital, also found later to be suffering from typhus fever and despatched to the South Eastern Fever Hospital, where he and Frederick W—— still remain. Mrs W—— was admitted on Feb. 14th to the Park Hospital where she is still under treatment. The father was notified as enteric fever on Feb. 18th and taken to Guy's Hospital where he died on the 22nd. The daughter Alice W—— entered Guy's Hospital on March 4th and was sent to the South Eastern Hospital with typhus fever on March 6th. The son, George W—— went into St. Olave's Union Infirmary on Feb. 21st and was removed with typhus fever on March 7th to the South Eastern Hospital.

My own patient, Mrs B—— was notified on Feb. 20th, from Guy's Hospital, as having resided at No. — Southwark Bridge-road, in the parish of St. George the Martyr. She had removed to that address two days previously from No — Weston-street, Bermondsey. On inquiry a direct communication with the group of cases at No — (c), Minto-street was established by the fact that she sat up one night with her brother Richard W—— while a patient at King's College Hospital, where he died as already stated on Jan. 30th. Other cases doubtful in nature and origin are still under investigation.

On the strength of the above facts I think we may be fairly justified in arriving at the following conclusions:—1. That there has been a direct chain of communication between the two cases of typhus fever notified in the parish of St. George the Martyr on Oct. 19th 1898, and Feb. 20th, 1899. 2. That the infection was carried out of the parish by the father of the first patient. Had he entered the reception house with the rest of the family in all probability the centre of original infection would have entirely been stamped out.

In conclusion, I have to acknowledge the cordial assistance afforded me in the course of the above investigations by the authorities of the various hospitals, the medical officers of health, and the local medical men concerned.

I have the honour to be your obedient servant,

(Signed) F. J. WALDO
Medical Officer of Health

Vestry Hall, St. George, Southwark,
March 21st, 1899.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF MEDICAL OFFICERS OF HEALTH

Kingston upon-Thames Urban District.—The milk supply of Kingston is, Mr H Beale Collins tells us, procured in large part from Hants and Dorset, in neither of which counties does he regard the sanitary administration as satisfactory. As he observes those cowkeepers who possess cows purchase 'railway milk' in addition and sell the milk of their own cows to their better customers alone, the poor coming in, in the main, for the 'railway milk.' Mr Collins refers to an arrangement made recently at Havre for sterilising milk, the charge to the rich being little and to the poor *nil*. He states that this provision has had a marked effect in reducing the cases of infantile tuberculosis. He suggests that this sterilisation might in this country be carried out by parochial charities. But why not by private individuals?

St. Marylebone Sanitary District.—Mr Wynter Blyth draws attention in his current annual report to the large number of private nursing establishments which exist in certain streets in this district, and he points out that the operations and conditions frequently associated with the patients in these hospitals necessitate the deposit of litter in the streets to deaden the noise of the traffic. As there is no definition of the term "illness" in the Public Health Act it is difficult for the vestry to take action until the straw becomes so offensive as to be a nuisance. Mr Blyth thinks that the vestry should possess power to regulate this indiscriminate deposition of litter, and the Marylebone Vestry have approached the London County Council with the view of some such powers being provided for by statutory enactment.

Erdington Urban District.—An outbreak of enteric fever occurred in the workhouse in this district during 1898 and Dr Bostock Hill the medical officer of health, was invited to inquire into it. There were seven cases in all, five being inmates and two being officials the attacks in so far as the inmates were concerned being confined to one block. Milk and water were, Dr Hill thinks easily excluded from being concerned in the causation and he is inclined to attribute the outbreak to the foul condition of the closets connected with the invaded block. The two officials apparently contracted the disease from infected persons or clothes.

Northwich Rural District.—The council of this district have apparently declined to re-appoint their medical officer of health, and with regard to the matter Mr T W H Garstang very pertinently points out that however zealous and successful a medical officer of health may have been he is liable to be removed from office by the simple expedient of the council refusing to re-appoint him. Mr Garstang regards 'the impotence of the Local Government Board in this matter as nothing less than a national misfortune, for sanitary abuses are concealed and sanitary improvements are ignored in all those cases where the power of the council is exerted to muzzle the medical officer of health and to mould his report. There will no doubt be a remedy some day, when the general public is educated up to the point of recognising the necessity for the fearless and honest administration of the sanitary laws independently of local interested control."

Exeter Urban District.—The city of Exeter still continues to procure its water from the river Exe, but the council have, it appears from Dr John Woodman's current report, applied to the Local Government Board for sanction to borrow money to considerably increase the number of filtering beds and if these works are completed much improvement will ensue. The public abattoir in the city is increasing in favour with the butchers and several cases of tuberculosis—nearly all in cattle imported into the country—have been detected. Dr Woodman evidently looks forward hopefully to the completion of the sewerage scheme which will have the effect of intercepting the small outfalls discharging into the river as it passes through the town. The whole of the sewage will then be treated by the well known method of which Mr Donald Cameron, the city surveyor, is the discoverer.

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 6570 births and 5050 deaths were registered during the week ending April 1st. The annual rate of mortality in these towns, which had been 23 3 and 23 1 per 1000 in the two preceding weeks, was again 23 1 last week. In London the rate was 22 0 per 1000, while it averaged 23 8 in the 32 provincial towns. The lowest death rates in these towns were 13 2 in Cardiff, 17 1 in Croydon, 17 5 in West Ham, and 18 8 in Leicester, the highest rates were 28 6 in Liverpool, 28 8 in Birmingham, 30 4 in Oldham, and 31 3 in Manchester. The 5050 deaths in these towns included 401 which were referred to the principal zymotic diseases, against 418 and 397 in the two preceding weeks, of these 132 resulted from whooping cough, 108 from measles, 68 from diphtheria, 38 from diarrhœa, 35 from "fever" (principally enteric), and 20 from scarlet fever. The lowest death rates from these diseases were recorded in Cardiff, Huddersfield, Halifax, and Gateshead, and the highest rates in Swansea, Birkenhead, Burnley, and Oldham. The greatest mortality from measles occurred in Bolton and Manchester, and from whooping-cough in Plymouth, Bristol, Birkenhead, Burnley, and Hull. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 68 deaths from diphtheria included 31 in London, 10 in Swansea, four in Sheffield, three in Birmingham, and three in Liverpool. No fatal case of small pox was registered last week in any of the 33 large towns, and only one small-pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday last, April 1st. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2312, against numbers declining from 2584 to 2355 on the three preceding Saturdays, 167 new cases were admitted during the week, against 217, 224 and 177 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London which had been 555 and 604 in the two preceding weeks, declined again to 505 last week but were 94 above the corrected average. The causes of 51, or 1 0 per cent, of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Nottingham, Leeds, Newcastle-upon-Tyne, and in 14 other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Liverpool, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns, which had been 21 0 and 21 8 per 1000 in the two preceding weeks, further rose to 23·3 during the week ending

deficient in quantity The river is large enough to provide for all needs, but the pumping stations have been shamefully neglected and the quantity of water which they provide notably to the Germantown or 22nd Ward, is altogether insufficient Mr Tattnall Paulding, President of the Delaware Insurance Company, writes to the authorities that "this section of Germantown in which I reside is without a sufficient supply of water for safety either in the matter of health or fire," and adds, "I desire to give notice that should loss occur by fire, or should typhoid fever or other fever occur in my house of a nature proceeding from defective flushing of the pipes I shall hold you officially responsible, since there is absolutely no reason why Germantown should not be supplied with sufficient water for at least the flushing of the pipes and for fire purposes As to its foul and disgusting condition I have nothing to say at this time, but I do demand a sufficient quantity, such as it is"

At the Manufacturers' Club a meeting was held and an influential committee appointed "to coöperate with the Bureau of Water to secure from councils such legislation as will prevent waste, and obtain appropriations to provide an ample and good supply of water, and that an initial filtration plant or plants be installed pending any measure which may afterwards become necessary for securing our supply from other sources now remote" The committee appointed according to this resolution having made inquiries now reports that the deplorable condition of the water supply is due to the persistent refusal of the councils to make the necessary appropriations for improving the water plant In 1896 it was estimated that $2,835,150 were needed for such improvements and extensions After many ardent discussions the municipal council granted the Water Bureau $1000 In 1897 it was calculated that $3,327,750 were required for the waterworks, but not a single dollar was granted either during that or the following year The consumption of water in Philadelphia has greatly increased of late years, but part of this increase is attributed to waste and the introduction of automatic closing valves is very necessary At Spring Garden, where the largest pumping station is situated, the engines cannot work to their full capacity for want of proper boiler pressure, and the stock of coal would not last more than five days, so that in the event of a blizzard or a railway servants' strike the water supply might be stopped altogether Thus it will be seen that the municipal council have not only refused to provide means of filtering the water but there has been an all round neglect of the question in all its details No wonder that these supine authorities are now roundly abused and are constantly declared to be guilty of wholesale manslaughter when, indeed, a stronger word is not employed That the council should hesitate to incur the enormous expense of bringing water from a pure but distant source may be understood, but there is no reason why they should not have organised long ago better methods of pumping, a better fuel-supply, and some provision for the prevention of the waste of water Finally, when water is taken from a river which receives the crude sewage of vast populations and the untreated refuse from innumerable manufactories, the least that can be done is to institute filtering beds of the best and safest description That this has not been even attempted is due, we are told, to local political or party intrigues and exigencies

It is not surprising that under these circumstances a powerful agitation has been started in favour of water reform But at the same time and so as to avoid a reaction which would be dangerous to the cause of sanitary reform in general it should be made quite clear that a pure water-supply is not the only sanitary measure required If contaminated water alone sufficed to produce typhoid fever everyone in the town who drank the water would have the fever It is true that many towns which have secured a supply of pure water have a very low death rate from typhoid fever Dr A O Abbott, the chief bacteriologist of the Board of Health, has prepared tables showing that cities supplied with pure mountain spring water—namely, Berlin and Munich—have an annual death rate from typhoid fever which only amounts to four per 100,000 of the population and that at Berlin, London, the Hague, Rotterdam, and Edinburgh, where the water is properly filtered, the rate is only equal to 8 3 per 100,000 whereas at Philadelphia the rate is 60 8 per 100,000 But these figures are incomplete Toulon, Havre, and Belfast have excellent water supplies yet these towns have been decimated by typhoid fever The water supply of Marseilles is sometimes muddy but it is not contaminated and but few towns have shown a greater susceptibility to cholera and to typhoid fever Finally, if we take the town of Philadelphia itself three important facts stand out in the history of these typhoid fever epidemics Firstly, the general death rate was not increased in a notable manner during the years when typhoid fever was especially prevalent, secondly, during the present epidemic it is estimated that 50 per cent. of the victims are children, and, thirdly, the disease is very unevenly distributed all over the town During the week ending March 18th 477 cases were reported from the 40 wards into which the town is divided In Ward 3 there was but one case, in Wards 11, 13, 16, 17, and 35 there were three cases, in Wards 5, 12, 18, and 31 there were four cases, but in Ward 20 there were 21 cases, in Wards 33 and 38 there were 25 cases, in Ward 28 there were 32 cases, in Ward 15, 41 cases, in Ward 22, 45 cases, and in Ward 29 47 cases If the water is the only cause of this outbreak of typhoid fever why this extraordinary difference in the distribution of the disease and why also are there such a large number of children ill? Evidently other causes are also at work Contaminated water is undoubtedly a very efficacious means of producing typhoid fever among those who are predisposed, but persons whose reduced vitality renders them an easy prey to this disease are likewise liable to contract other diseases If they have pure water this does not always mean that their lives will be spared, but it may simply mean that they will die from some other disease Sanitation comprises two distinct lines of action. Measures must be taken to prevent the spreading of pathogenic germs, therefore a pure water supply must be secured But it is quite as important to take such general sanitary measures—the prevention of overcrowding, proper drainage, &c—as will prevent that predisposition to disease which renders epidemics possible In all probability careful local investigation would show that in those wards where the epidemic has proved especially fatal there are other causes at work besides the foul water supply The present is an excellent opportunity for bringing to light all these defects and for obtaining the sanction and popular approbation for all measures of reform dealing, not only with the water-supply, but with many other sanitary defects which undoubtedly exist

TYPHUS FEVER IN LONDON

THE following is a special report which has been presented by Dr Waldo to the Vestry of St George's, Southwark, on this important subject —

LADIES AND GENTLEMEN —On Feb 20th, 1899, a case of typhus fever was notified to me as occurring at No — Southwark Bridge-road. On inquiry I found that the patient had come from Bermondsey suffering from the malady and that several of her relatives had been attacked with mysterious illnesses During 1898 two other cases of typhus fever occurred in this parish. The first of these was in April and was traced to Kensington but did not spread in St. George's The second occurred in October and its origin could not be ascertained Some of the members of the infected family went to a house in Bermondsey where the disease subsequently developed Under these circumstances it occurred to me that there might be a possible connexion between the case notified to me last October and the one brought to my notice in February On inquiry I found such a connexion and was enabled to trace the following interesting and suggestive train of events.

When the first case was notified I closed the house and induced all the inmates to enter the reception house with the exception of the father who went away and slept two nights at No — (a) Minto-street, Bermondsey This fact I at once communicated to the medical officer of health of Bermondsey In the house at No — (a), Minto-street there were resident four families On or about Dec. 15th Mrs. F—— a resident at No. — (a), was taken ill and was admitted to Guy's Hospital on Dec. 18th. She was there treated for supposed enteric fever and was discharged to a convalescent home on Jan. 22nd The father's visit to No. — (a) was paid to his son and daughter in law, who on Dec. 24th 1898, removed to No. — Tabard street, Newington On Jan. 13th 1899 the son was taken ill and removed in a delirious condition to Newington Workhouse where he died on Jan. 18th. The wife of the last patient was taken ill about the same date and died at the aforesaid No. — Tabard-street on Jan 14th. Returning to No. — (a), Minto-street we find that Mrs. F who was first attacked there on the night before she went into Guy's called at No — (c), Minto-street and arranged for one of her boys being taken there as a lodger At the same time she interviewed a woman from No — (b) who undertook to take charge of a second son. Towards the end of January the son who had been left at No. — (b) Minto-street was removed to St. Olave's Union Infirmary where he still remains at the time of report (March 13th, 1899) Returning to No — (c), Minto-street we find it inhabited by the W—— family—father mother, three sons, and two daughters and the recently admitted son of Mrs. F—— Seven of these eight persons were admitted to hospital at various dates up to March 7th and all these cases have been recognised either at the time or subsequently as typhus fever The son, Richard W——, was taken ill on Jan. 14th and admitted on the 18th to King's College Hospital, where he died on the 30th The son, Frederick W——, was

mostly volunteers, appear to have behaved with great dash and gallantry in crossing the open under fire from the insurgent entrenchments which had been constructed in numerous directions The losses on both sides are mounting up, those on the rebel side are heavy The nature of the country, with its jungles and cover, the great heat at the present season, and the character of the resistance have proved greater obstacles to success than anticipated but the forces of the United States are nevertheless bound to succeed in the end The accounts of the fighting show that the Americans are pursuing the campaign with vigour and dash We hear but little of the medical arrangements, but we have reason to hope and to believe that they are being much more satisfactorily carried out than was the case in Cuba We are glad to notice that some of our naval surgeons did all they could in aiding and attending to the wounded during the fighting A list prepared at the Adjutant-General's office shows that 157 Americans have been killed and 884 wounded in the Philippines since Feb 4th What with the capture and destruction of Malolos, the retreat of Aguinaldo, and the dispersion of the forces of the insurgent government, defeated and discouraged as they must be, there are indications that the war in the Philippines is fast coming to a close The recent proclamation by General Otis moreover, of the intentions of the American Government should have a reassuring effect upon the Philippine population Whilst upon this subject we would call attention to a paper lately read before the New York Academy of Medicine by Louis L Seaman M D, LL B, late Major-Surgeon First Regiment United States Volunteer Engineers, on the United States Army Ration. The paper in question shows, on physiological and hygienic grounds, that several changes are essentially necessary in order to adapt the ration to the requirements of tropical climates Much of the sickness, invaliding and loss of life among troops campaigning in such climates is directly due to the food and clothing being opposed to the requirements of the climate instead of being attributable to the climate itself.

THE TREATMENT OF SYPHILIS IN THE PUBLIC SERVICES

Medical officers and others interested in the treatment of syphilis would do well to read a pamphlet on the above subject by Major F J Lambkin of the Royal Army Medical Corps, published by John Bale, Sons, and Danielsson, Limited of Great Titchfield street, W The author of the pamphlet in question recounts his experience (which has been considerable) of the use of mercurial cream by intra muscular injection in the treatment of syphilis and enters into all the details connected therewith as well as into those relating to the patients personal hygiene, diet, &c The method of treatment pursued at Aix la Chapelle, which is by mercurial inunction, is pretty well known, and Major Lambkin went to Aix in order to learn how to carry out this method, but he subsequently found it so difficult to do this thoroughly that it proved impracticable and he therefore had recourse to other methods of attaining the object in view, and finally adopted that based upon the principle advocated by Lang of Vienna who used what may be termed a mercurial cream The patient receives a mercurial injection, as modified by Major Lambkin, once a week and under ordinary circumstances need not remain in hospital but regularly attends for the purpose. There is one point on which the surgeon is very properly cautioned—viz., that the use of mercury is very easily overdone and sometimes to the grave injury of the patient, The effect of the metal in each individual case consequently needs to be carefully watched in order to guard against this The body weight is a good guide and the patient's weight should be regularly recorded whilst undergoing treatment. A difficulty which arises is as to how patients who are exceptionally susceptible to the injurious action of mercury can be safeguarded, but Major Lambkin's experience of intramuscular injections amounting to over 7000, of a preparation of mercury lanolin, and carbolic oil does not appear to have been attended with any evil or mishap. The operation is stated to be practically painless and no soldier has been incapacitated from doing his duty The perchloride and other watery solutions are, of course, much handier and easier to inject, but their use is attended with more pain and, on the whole, the injection of mercurial cream is preferred

MEDICAL STUDENTS AND CONSCRIPTION

In most of the countries where conscription is in force students of medicine are not called upon to serve until either they have successfully passed their final examinations or else have had a reasonable opportunity of doing so In the former case they are required to do duty for one twelvemonth only during which they are almost invariably employed as assistant surgeons but in the latter they are compelled to carry out ordinary duty in the ranks for a period of three years In France, however, the arrangements are much less convenient, not to say less reasonable It is true that medical students are asked to put in one year's military service only and not the usual three, but as a rule the timing of their summons to the colours necessitates the interruption of their professional studies and, worse still, instead of being drafted into the Corps de Sante where their technical acquirements could be utilised and where they would have an opportunity of perfecting their knowledge of military medicine they are obliged to waste their precious hours in the performance of routine work in the guise of *fantassins* or private soldiers Ever since the introduction of this foolish and wasteful system in July, 1889, the entire medical press throughout France has not ceased to protest against it, but without avail The authorities are said to be afraid of responding lest they should then be logically unable to refuse a similar concession to the seminarists or ecclesiastical students They deem themselves bound to realise the notorious cry "Knapsacks for the clergy,"[1] and to this end they have no hesitation in not only seriously cramping the sanitary organisation of the army, but also in grievously interfering with the curriculum of the rising generation of medical practitioners Of late the military journals following the lead of their professional contemporaries have taken the matter up zealously and the present War Minister has shown signs of being more amenable than was his predecessor, General Billot There would therefore seem to be grounds for hoping that, as one writer puts it, patriotism may be for once triumphant over politics, to the immense advantage of the medical fraternity and above all of the army

ARMY MEDICAL SCHOOL, NETLEY

The summer session of the Army Medical School opened on Wednesday, April 5th It was attended by 51 surgeons on probation (admitted by competition)—30 for the Royal Army Medical Corps and 21 for the Indian Medical Service Several nominations have also been given to the medical schools, we believe, and the number for the Royal Army Medical Corps will be thereby augmented The following is a corrected list of those who have entered the school through competition, the names being given in order of merit —

ROYAL ARMY MEDICAL CORPS.

1. G G Delap.
2. F Warren.
3. R. A. Cunningham.
4. V G Crawford.
5. F J Palmer
6. A. Challis.
7. H. Simson.
8. (Resigned).
9. S G Butler
10. G H. Irvine.
11. W A. Woodside.
12. W R Blackwell.
13. H. B. Onraet.
14. P H. Falkner.
15. H. F Hart.
16. L. F F Winslow
17. H. H. Norman.
18. A. Chopping
19. J J W Prescott.
20. O W A. Elsner
21. A. L. A. Webb
22. E. E. Ellery
23. H M. Nicholl
24. F S. Walker
25. J I W Morris
26. H E. M. Douglas
27. E. T. Inkson.
28. F R. A. Heggs
29. A. A. Seeds
30. J A. Langstaff.

INDIAN MEDICAL SERVICE.

1. C Dykes.
2. W E. McKechnie.
3. E. D A. Creig
4. D Mckay
5. J J Urwin.
6. W F Harvey
7. H D Pelle.
8. W E. H. Forster
9. D H. F Cowin.
10. A. B. Fry
11. C E G Maddock.
12. A. W Tuke
13. M. W Manul
14. W H. Tucker.
15. C. S Lowson
16. J H. Beaman.
17. V H. Dickinson.
18. G W Stewart.
19. D N Anderson
20. J Sloan.
21. M. N Chandhuri.

THE SUPPLY OF AN ARMY IN THE FIELD

At the Prince Consort's Library Aldershot on Tuesday, March 28th Major-General Hildyard being in the chair Lieutenant-Colonel E T Clayton, A.S C, delivered a lecture on this subject. General Sir Redvers Buller, who took part in the discussion said that there was no subject better worth the study of officers than that of supplying an army in the field. His experience had taught him that the more fresh bread the troops got the better they would march He advocated the principle of throwing the responsibility of hospital supplies on the medical officers Surgeon General O Dwyer and others also took part

[1] "Les curé sac au dos.

April 1st, and slightly exceeded the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 18 9 in Paisley and 22 2 in Dundee to 28 1 in Aberdeen and 29 9 in Greenock The 711 deaths in these towns included 32 which were referred to diarrhœa, 30 to whooping cough, 25 to measles, four to scarlet fever, four to "fever," and two to diphtheria In all, 97 deaths resulted from these principal zymotic diseases, against 90 and 67 in the two preceding weeks These 97 deaths were equal to an annual rate of 3 2 per 1000, which was 1 5 above the mean rate last week from the same diseases in the 33 large English towns The fatal cases of whooping cough which had declined from 31 to 22 in the four preceding weeks rose again to 30 last week, of which 12 occurred in Edinburgh, 10 in Glasgow, and five in Leith The 25 deaths from measles showed an increase of four upon the number in the preceding week, and included 13 in Glasgow, nine in Aberdeen, and three in Edinburgh The fatal cases of scarlet fever, which had been five and six in the two preceding weeks, declined to four last week, of which two occurred in Glasgow and two in Edinburgh The four deaths referred to different forms of "fever" corresponded with the number in the preceding week, and were all recorded in Glasgow The deaths from diseases of the respiratory organs in these towns, which had been 138 and 151 in the two preceding weeks, further rose to 160 last week, but were 18 below the number in the corresponding week of last year The causes of 38, or more than five per cent, of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death rate in Dublin which had been 32 4 and 31 9 per 1000 in the two preceding weeks further declined to 31 6 during the week ending April 1st During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 29 6 per 1000, the rate during the same period being 20 5 in London and 23 9 in Edinburgh The 212 deaths registered in Dublin during the week under notice were within two of the number in the preceding week, and included 12 which were referred to the principal zymotic diseases, against numbers declining from 17 to 8 in the four preceding weeks, of these, three resulted from whooping cough, three from diarrhœa, two from scarlet fever, two from diphtheria, two from "fever," and not one either from small-pox or measles These 12 deaths were equal to an annual rate of 1 8 per 1000, the zymotic death rate during the same period being 1 7 in London and 3 5 in Edinburgh The fatal cases of whooping cough which had been 10 and two in the two preceding weeks rose to three last week The two deaths referred to different forms of "fever" showed a decline of two from the number in the preceding week, while the mortality from scarlet fever and from diphtheria exceeded that recorded in the previous week The 212 deaths in Dublin last week included 35 of infants under one year of age and 65 of persons aged upwards of 60 years, the deaths of infants showed a slight decline, while those of elderly persons exceeded the numbers recorded in the preceding week Five inquest cases and six deaths from violence were registered, and 94, or more than a third, of the deaths occurred in public institutions The causes of 13, or more than six per cent of the deaths in the city last week were not certified.

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

THE following appointments are announced —Surgeons W R. Knightley to the Royal Marine Infirmary, Portsmouth, and J H Fergusson to the *Excellent*, lent

ROYAL ARMY MEDICAL CORPS

Colonel Richard P Ferguson is placed on retired pay Lieutenant-Colonel James A Clery, M B, to be Colonel, vice R P Ferguson Major R F Adams, M B, retires from the service, receiving a gratuity Captain William George Beyts is seconded for service on the Staff Lieutenant Joseph McArdle, M.B, is seconded for service with the Egyptian Army Lieutenant N H Ross has been attached for duty to the Station Hospital, Kirkee Captain G E Hughes will be held in readiness to embark for service in India Major C E Faunce has embarked for Malta. Major S E Duncan has taken over medical charge of the troops and Station Hospital at Londonderry from Major R L Love, who has proceeded to Dundalk, to take over medical charge of the troops and station hospital there Lieutenant Colonel R G Thomsett has taken over charge of the Station Hospital at Belfast and command of No 15 Company Major B. M Skinner has arrived for duty in the Home District Lieutenant R E G Phillips has been attached to the 1st Life Guards Major Harwood, attached to the Cambridge Hospital, Aldershot, has been placed under orders for India

Lieutenant-Colonel John J Greene retires on retired pay Captain William S Boles and Captain Albert L F Bate are promoted to be Majors

INDIA AND THE INDIAN MEDICAL SERVICES

Lieutenant-Colonel W A Mawson has been appointed Principal Medical Officer with the Tochi Force, vice Lieutenant-Colonel Bookey The services of Captain W Young (Bengal) are placed permanently at the disposal of the Government of the North Western Provinces and Oudh Surgeon General W S M Price, is appointed to officiate as Principal Medical Officer, Bombay Command, vice Surgeon General A F Churchill, appointed Officiating Principal Medical Officer, Her Majesty's Forces in India Lieutenant-Colonel W J Charlton, R A.M C, is appointed to officiate on the Administrative Medical Staff of the Army with the temporary rank of Colonel vice Colonel E Townsend, C B, R A M C Major A R P Russell is appointed to officiate as Civil Surgeon and Superintendent of Jails, Mandalay, in place of Lieutenant-Colonel S H Dantra Captain F J Dewes is transferred from Meikhila to Rangoon and is appointed to officiate as Civil Surgeon and Port Health Officer, Rangoon, in place of Lieutenant-Colonel G T Thomas Major W A Sykes D S O, 8th Bengal Lancers, is placed in charge of the civil medical duties of the Sialkote District in addition to his military duties, vice Major G W P Dennys Major C P Lukis Civil Surgeon, Agra, is appointed to hold visiting medical charge of Etawah in addition to his other duties Captain C M Moore, Medical Officer of the 2nd Regiment, Central India Horse, is appointed to officiate as an Agency Surgeon of the second class and is posted to the Bhopal Agency

ARMY MEDICAL RESERVE OF OFFICERS

Surgeon Lieutenant-Colonel M Benny having resigned his appointment in the Volunteers, ceases to belong to the Army Medical Reserve of Officers

VOLUNTEER CORPS

Artillery 1st Aberdeenshire Surgeon Lieutenant J Marnoch to be Surgeon Captain 3rd Kent (Royal Arsenal) Surgeon Major Arthur Henry Robinson, late 2nd Middlesex Volunteer Artillery, to be Surgeon Major Surgeon Captain T E Stuart and Surgeon Lieutenant F A Brookes will be transferred from the 1st to the 2nd Essex Volunteer Artillery Corps *Rifle* 4th (Cambridge University) Volunteer Battalion the Suffolk Regiment Robert Williams Michell to be Surgeon Lieutenant. 2nd Volunteer Battalion the East Yorkshire Regiment John Chestnutt to be Surgeon Lieutenant 4th Volunteer Battalion the Cheshire Regiment Brigade-Surgeon Lieutenant-Colonel W E S Burnett resigns his commission, is permitted to retain his rank and to wear the uniform of the battalion on his retirement. 4th Volunteer Battalion the South Wales Borderers Surgeon Lieutenant T E Lloyd to be Surgeon Captain 1st Volunteer Battalion the Manchester Regiment Surgeon Lieutenant R S Rodger resigns his commission 2nd Tower Hamlets James Steel Swain to be Surgeon Lieutenant 4th Volunteer Battalion the Devonshire Regiment Surgeon Captain C F Glinn resigns his commission 4th (Nottinghamshire) Volunteer Battalion the Sherwood Foresters (Derbyshire Regiment) Surgeon Captain F H Appleby to be Surgeon Major 5th (Ardwick) Volunteer Battalion the Manchester Regiment Surgeon-Captain J G Saville to be Surgeon Major

THE WAR IN THE PHILIPPINES

The Americans have met with a more determined resistance from the insurgent Filipinos than they anticipated Their brigades had a good deal of fighting in the neighbourhood of Manila and subsequently when they advanced towards the entrenched positions held by the insurgents and drove them back The Filipinos burned the town of Malabon which is in ruins The American troops,

"CERTAIN ORGANISMS ISOLATED FROM CANCER AND THEIR PATHOGENIC EFFECTS UPON ANIMALS"

To the Editors of THE LANCET

SIRS,—May I correct a few misapprehensions to which Mr John D Malcolm's letter in THE LANCET of April 1st upon my paper on the above subject[1] may give rise?

My paper, as read before the Royal Society, contained little more than the record of certain experiments connected with the isolation and pathogenic properties of certain organisms, but Mr Malcolm objects to certain terms therein used.

He maintains that I have not proved that "malignant tumours" have been produced What has been produced by the organisms in certain animals is this —multiple tumours in various parts, and the death of the animal I think that the term "malignant tumours" is an accurate one for this set of conditions

Mr Malcolm says that I asserted that I had obtained "pure cultures of parasites standing in causal relationship to cancer" I did not assert anything of the kind I stated the fact that I had obtained a pure culture of an organism from a cancer, which organism was pathogenic to animals, and I also previously stated that I, in common with Metchnikoff, Ruffer, and others, *regarded* as parasites standing in causal relationship to the disease certain cell inclusions which could be found in cancer

Mr Malcolm says that I do not state whether any tumours resulted from the experiments numbered 4 and 5 in my paper It seems obvious in a summary of experiments on a certain subject that if there had been any results I should have recorded them, and that no mention would imply absence of results, as was the case with the two experiments in question

In reference to Mr Malcolm's second paragraph the growths produced in the peritoneum were certainly not carcinomatous, how could they be? They consisted principally of endothelial cells, as did also those in the lungs

With regard to the corneal experiments referred to in his third paragraph, all I can say is that after 48 hours the epithelium had proliferated considerably and had dipped down into the subjacent tissues I showed also at the Royal Society, a slide of a cornea five to six days after inoculation, in which the epithelium had burrowed into the deeper layers of the cornea for a considerable distance in all directions from the point of inoculation. This does not happen in the control experiments I have made in which no organisms have been used.

Mr Malcolm begs the question when he says that I believe that the organisms are capable of inducing cancer I have nowhere stated so, I cannot yet tell, as the matter is still in the experimental stage and my communication to the Royal Society was only a preliminary record of certain results obtained up to the present time.

With regard to the fourth paragraph in Mr Malcolm's letter the culture used was as stated in the third section of my paper, isolated from the case there mentioned

The conclusions which Mr Malcolm hints that I have too confidently adopted are quite logically deducible from the experiments which I have described. That I have used the word "tumours" is true, but it seemed to me to be the least objectionable word to adopt, and I think that new formations, occurring as swellings or lumps in places where there should be none and visible withal to the naked eye, may fairly be so called. That such tumours, or new growths, were produced is certain, that they were structurally endotheliomata in the peritoneum and lung is also certain, and that in the cornea the new growth was epithelial is also certain. Consisting as they did, then, of endothelial cells in the *one* case, and of epithelial cells in the other, they could hardly be called "inflammatory," unless this word is used in the sense of meaning certain specific phenomena of resistance, in which case cancer itself may, I think, be called "inflammatory"

I am, Sirs, yours faithfully,

H G PLIMMER

St John's Wood road, N W., April 4th 1899

[1] THE LANCET March 25th, 1899

"THE HEALTHIEST CITY IN THE WORLD"

To the Editors of THE LANCET

SIRS,—Under the above title in THE LANCET of April 1st Dr Benjafield of Hobart, Tasmania, has given some interesting particulars of the health of Hobart and has thrown down a challenge He will find that although the health of Hobart is apparently very good many English towns can easily beat it In Eastbourne, for instance, the population of which last year was 5000 larger than that of Hobart, the total deaths were 68 less than the deaths of Hobart, the death rate being 10 8 per 1000 instead of the 14 0 of which Dr Benjafield is proud For the year 1897 the death rate of Eastbourne was under 10 per 1000, each of the above rates being inclusive of every death—visitors, workhouse, and hospitals included. With regard to the special challenge of Dr Benjafield as to deaths under 65 years of age it is impossible to ascertain the death rates at various ages without knowing exactly the population at various ages as well as the number of deaths He divides his total death rate of 14 exactly into two unequal portions as being the death rates above and below 65 years of age This does not give a correct death rate in any way It is obvious that if, to take an extreme case, nine-tenths of his people were over 65 years of age whereas only one-tenth of our people were over 65 years of age, his total number of deaths below 65 years of age might be very minute compared with ours, while the rates might be very much the reverse His challenge cannot therefore be taken up on his present figures, the death rates for persons over and under 65 years of age respectively must be calculated on the numbers living in the respective age groups and not by simply dividing the total rate

I am, Sirs yours faithfully,

W G WILLOUGHBY, M D Lond.,
Medical Officer of Health.

Town Hall, Eastbourne, April 2nd 1899

SUDDEN DEATH NO INQUEST

To the Editors of THE LANCET

SIRS,—At 3 45 P.M on March 30th a man stopped my carriage in the street asking me to go to a house within a quarter of a mile to see a woman who had fallen down in a supposed fit I went straightway and found a woman dead on the floor Apparently there was nothing to account for death I was told that she had not complained of illness, nor had she been seen by any medical man previously Information was at once sent to the coroner, but on the morning of March 31st I was informed that he did not consider an inquest necessary To this moment I have no idea of the cause of death in this case

I am, Sirs, yours faithfully,

THOS ALPH. BUCK, M.B Lond,
Surgeon to the Royal Isle of Wight Infirmary and County Hospital.

Ryde, April 3rd, 1899

*** It must be remembered that a coroner's duty is not only to hold inquests but also to decide if they ought to be held. We must suppose, therefore, that the coroner in this case was put in possession of private information enabling him to be certain that the death followed upon natural causes It is a little difficult to conjecture what this information could have been, while from our correspondent's statement the absence of an inquest is simply astounding —ED L

THE IRISH MEDICAL ASSOCIATION

To the Editors of THE LANCET

SIRS —It has been arranged that the *annual* meeting of the Association shall be held for this year in Cork, and it appears to be in contemplation that, at least in each alternate succeeding year, the *annual* general meeting shall be similarly held in Belfast, Galway, and other provincial centres It is known to the Association in Dublin and Cork, and probably elsewhere, that I am strongly opposed to this new departure, and, as I feel that my action in the matter may be misinterpreted by the members of the Association in a sense unfavourable to me I beg your permission to give my reasons Before doing so I desire to say that so far from wishing to throw cold water on any effort of my provincial brethren to organise

ARMY RECRUITING

The new system under which recruiting for the Army will be conducted came into effect last week Under the altered conditions, while the Inspector-General of Recruiting will continue, in conjunction with the Adjutant-General, to discharge the more important duties attached to the appointment, the general officers commanding districts will be held immediately responsible for the administration and supervision of the recruiting in their commands They will have a sum of money allotted to them annually for the payment of all expenses connected with recruiting

THE CHADWICK TRUST

The trustees have, on the nomination of the Director General of the Royal Navy Medical Service, awarded the Chadwick Naval Prize of £100 and a gold medal to Surgeon O W Andrews, M B Durh , R N , in consideration of his excellent work at the Royal Naval Hospital at Haslar in connexion with sanitary science

MAJOR MARCHAND'S MEDICAL OFFICER

Dr J Emily of the French navy who accompanied the Marchand mission to Fashoda, has been specially selected for promotion from the second to the first class and is to carry out his new duties at Lorient

Lieutenant-Colonel Miller, R A M C , writing from the station hospital, Meean Meer, Punjab, suggests that those interested in the welfare of British troops might from time to time despatch to that place newspapers, periodicals, &c , for the use of the sick and convalescent soldiers

Inoculations against enteric fever have now been carried out by Professor Wright, Professor of Pathology at Netley, at three Indian stations, viz , Bangalore, Pindi, and Lucknow

Surgeon-Lieutenant Colonel John O'Connell Hynes, 1st Nottinghamshire Rifle Volunteers, died at Goldsmith street, Nottingham, on March 25th

Correspondence.

"Audi alteram partem"

INSTRUCTION IN TROPICAL DISEASES

To the Editors of THE LANCET

SIRS,—May I be permitted from personal experience to express some doubt as to the absolute necessity for the teaching of tropical medicine as a distinctive feature? In the first place so much stress is being laid upon diseases not common in Great Britain that it seems to be forgotten that all the diseases of temperate zones flourish exceedingly within 30° north and south of the equator I see no small number of diseases of the respiratory organs, rheumatic fevers, tuberculous diseases of bones, &c In Johannesburg (a subtropical climate) enteric fever, measles, and cholera infantum were and I suppose still are, responsible for the heavy mortality of that city In this district (situated in 3° north latitude) diphtheria seems unknown, but at Bogota, the capital (4° 35″ N), a severe epidemic is now raging Epilepsy mental diseases, cretinism, and all diseases of the thyroid gland are but too common in this neighbourhood As to the so called tropical diseases I do not believe there really exists more difficulty (if as much) in their diagnosis and treatment, even when seen for the first time, than the practitioner feels at home I had not seen any cases of malarial diseases in England, but my first cases in the tropics were not more difficult to recognise and treat than my last It was easy enough to "spot" the first case of bilharzia I saw in Johannesburg, although it was not there endemic and although I had never before seen the ova It is to be presumed that everyone going abroad will read up any diseases peculiar to the locality he proposes practising in With the aid of his general medical education and a microscope I believe he will be at no great loss without the special training We have here a great number of specialities in diseases if I may so name them—e.g , pinta (locally carata), piedra, ankylostomiasis, pterygium, yaws, dengue, and béri beri—occasionally from the coast Almost any abdomen will show an enlarged spleen , dysentery and hepatic abscesses are frequent None of these give me as much trouble as determining an early case of phthisis or the treatment of an infant's diarrhœa

I do not pretend never to be in doubt as to the diagnosis, but I do maintain that I have felt no hindrance from my non acquaintance with any of these specialities before practising here If I ever have the opportunity of further study in Europe my time shall be spent in the wards of a general hospital and not in those of the tropical diseases department It is likely that the school will be useful to those who do not intend to practise abroad I can imagine that a case of pinta turning up casually in an out patient room might puzzle the specialist My remarks do not apply to research work which to my thinking requires special qualifications, did others think likewise medicine would have fewer absurd views to refute To avoid other misunderstanding let me say that my examiners considered my intelligence below that of the average medical student

I am, Sirs, yours faithfully,

M D EDER, B Sc Lond , M R C S Eng , L R C P Lond

Palmira, Colombia, South America, Feb. 25th 1899.

STOCKPORT AND DISTRICT MEDICAL SOCIETY

To the Editors of THE LANCET

SIRS,—We have been instructed to forward you for publication copies of two resolutions passed by this society at a special meeting held on March 30th, 1899

We are, Sirs, yours faithfully,

E A GOULDEN, H G SMEETH, } Hon Secs

Stockport, April 4th, 1899

[COPIES]

1. That the best thanks of this society be tendered to the Editors of THE LANCET for their editorial on the Stockport Centre of the St. John Ambulance Association" in THE LANCET of March 25th and for the able manner in which they vindicated the position not only of the medical society but of the medical men of the town

2. That in consequence of the offensive references and objectionable conduct of the local hon. secretary of the Stockport Centre of the St. John Ambulance Association to the Medical Society and some of its members individually prior to and arising out of the public meeting held in the Pendlebury Memorial Hall on Feb. 7th, 1899, the members of the Stockport and District Medical Society will reluctantly be compelled to abstain from lecturing in connexion with the local centre as at present constituted, until the hon. secretary withdraws and apologises for such references and conduct; and the society further suggests that the past management of this centre be officially inquired into by the Central Executive Committee in London.

THE COINCIDENCE OF DISEASES PLAGUE AND ITS ASSOCIATES

To the Editors of THE LANCET

SIRS,—We have in the combination of plague with other infectious diseases multiple examples of this coincidence Relapsing fever running concurrently with plague has been frequently observed and seems rather favourable for the patient than otherwise Measles are now prevalent in Bombay and several cases of this combination have been observed Small pox and also chicken pox have also been seen with plague These three diseases, however, do not combine favourably with plague and the dangers to the patients are correspondingly increased Plague occurs among lepers, in the subjects of early syphilis, and in the tuberculous The latter class of patients fare very badly If they survive the plague they soon succumb to phthisis, the poison of plague apparently favouring the development of the tubercle bacillus Again phthisical patients stand inoculation for plague very badly Another disease commonly associated with plague is malaria and here fortunately no increased danger apparently supervenes It would appear that provided the virulency of the plague is not intense so as to carry the patient off in a few hours the malaria poison gains the upper hand, and a case which commenced with the signs and symptoms of plague has substituted in it all the phenomena of malaria Of the cases of the acute infectious diseases—measles, small pox, and chicken pox—mixed with plague there are only a few examples This is not surprising, because in the first place they are hardly epidemic and because the varying periods of incubation make it an accidental opportunity for study when a compound case is brought to the hospital The incubation period of plague cannot be fixed to a nicety It probably averages about three days —I am, Sirs, yours faithfully,

Bombay March 20th. FREDERICK PEARSE, F R C S Eng

f Bombay deck passengers on the steamer *Courland* which as compelled to return to Zanzibar The present outlook n the Punjab plague infected area is considered very un atisfactory Arrangements which were in force last year or the protection of Simla against plague are about to be e-introduced There will be railway and road inspections at ara Devi, Tarvi, and Mashobra. Plague at Vellore in the Madras Presidency is increasing and great fears are now ntertained that the disease will spread before long to Madras city

The returns of plague for the Bombay Presidency show an ncrease of 258 cases and of 293 deaths, the cases being 3090 s against 2832 last week and the deaths 2535 as against 292 Increases are reported in Bombay city, Karachi, Surat, hana, Sholapur, Ahmednagar, Ratnagiri, and in the native tates of Cutch and Baroda The inspecting officers at the arious railway inspecting stations discovered 33 cases

Five cases of plague are reported from Hong Kong and the enice Convention regulations will be imposed against Hong Kong at Aden and ports in the Bombay Presidency and Sind.

The Plague Commission have returned to Bombay and will ontinue to take evidence until their departure by the *Arabia* n March 25th.—Dr Mullunnah of Hyderabad was again xamined on the experiments performed at Hyderabad and xpressed his dissent from some of the statements made by ieutenant-Colonel Lawrie I M S He did not think that he putrefactive and other organisms found in the nd which they first received belonged to it but were he result of contamination He contradicted the statement which had been made public that the bacillus f plague had been found by him in a sample of aw cotton —Captain Johnson had done inoculations with laffkine s fluid after it had been resterilised and the esults were much more satisfactory —Colonel Robertson, Resident of Mysore, said that the policy of administration as that when a case was discovered the house was marked nd the people were persuaded to vacate it and it was then isinfected The people for the most part slept on the floors Plague spread slowly, it did not jump from one place to nother —Khan Bahadur B B Patel, J.P, said that in his istrict there were about 8000 Parsees His experience was hat rats were found dead in the majority of cases preceding he incidence of plague amongst the human inhabitants nd that cases of plague generally followed in houses here dead rats were found Those living in good ell ventilated houses usually escaped even if dead rats ad been discovered. Those who left their houses nvariably escaped. In answer to the question whether lague was contagious the witness said that he had een people sitting in close proximity to plague patients nd hugging and kissing them and yet had not noticed a ingle instance where such people had been *subsequently* ffected by plague He did not believe that plague was ontagious In his experience not a *single case of plague* ad occurred amongst the Parsees who were inoculated — Sardar Khan Bahadur M Yakub (deputy collector, Sind) aid that houses in which there had been plague in one year ere found to be more liable to plague in the second pidemic than other houses As a rule houses with arth floors suffered more than houses with paved floors — Dr Cayley, divisional health officer, gave the results of he examination of the sputum in cases of primary and econdary plague pneumonia In the early stages of rimary pneumonia the sputum contained practically pure ultures of plague bacilli. Bacilli had been found in the throat everal days after the temperature had returned *to normal* n secondary pneumonia plague bacilli were found in the najority of cases and were present for *from five to 14* days fter the onset of lung symptoms Plague bacilli were not ound in perspirations or scrapings from the surface of the kin He had not succeeded in finding the bacillus in graveards or the floors of houses In one case it was found in a iece of matting on which a plague patient had been lying nd which was soaked with discharges —Major Crimmin M S, V C, port health officer, said the inspection of all essels leaving Bombay harbour commenced on Jan 1st 897 Up to date 162 064 vessels of all kinds arriving and eaving had been inspected and a total of 2 870,454 crew and assengers There had been 374 cases of plague discovered The incubation period of plague appeared to be from three o five days The clothing and bedding of native crews ound to ports out of India were now disinfected by team before the vessel left the harbour —Mr Du Boulay he Deputy Municipal Commissioner, said that the medical men sometimes did not report cases of plague and kept secrecy about them The voluntary workers employed on inspection, the friends, neighbours, and relatives of the patient were the sources of information of cases They always persuaded people to go to hospital and he did not know of any case where force had been employed Those in a moribund condition were left in their houses He admitted that removal of patients to hospitals led to opposition and the hiding of cases It would be impossible to isolate patients in the big chawls When a moribund case was found they supplied the people with disinfectants. It was not practicable for their staff to go there and disinfect the walls and floors periodically It would create opposition When they removed patients they disinfected the rooms Whenever death occurred from any cause the medical officer of the district visited the house and made inquiries

The Government bacteriologist has issued a report on experiments conducted in the Mysore Mines He says that the ordinary non spore bearing bacteria do not flourish in the soil in large numbers Two samples of soil at depths of 1400 and 1620 feet contained four different kinds of bacilli but no cocci The absence of cocci showed that delicate non-spore bearing bacilli like those of plague cannot flourish in underground soil The soil of the Ooregaum Mine is reported to have contained a large number of bacilli and cocci and appeared to be a good medium for the growth and propagation of plague-like bacilli. His experiments on cockroaches lead him to state that there is no reason to apprehend that they would be any source of danger even if the mines became infected with plague The cyanide tailings showed no bacteria when artificially infected with the plague microbe All the plague bacilli died on the second day, this being due to the absence of organic matter upon which bacilli could live

In answer to the applications from Natal and Mauritius for plague specialists the Government of India have appointed Captain Leumann, I.M S, for the former place and Lieutenant J S Stevenson, I M.S, for the latter Both officers have had considerable experience with regard to plague

MANCHESTER

(FROM OUR OWN CORRESPONDENT)

Explosion of Ether at the Rochdale Workhouse

THE adjourned inquest on the bodies of the two nurses who were killed by the explosion of ether at the Rochdale Workhouse on March 14th was held on March 29th before Mr Molesworth, the county coroner It may be remembered that the inquiry was adjourned in the hope that Nurse Barker might be able to give evidence but unhappily she also has succumbed to her injuries Three bottles of ether were supplied to the workhouse the day before the accident by a druggist at Littleborough who had them from a firm in Manchester A representative of this firm said that the explosion could not have taken place at the instant the bottle was broken Ether vapour was very heavy and would sink and then travel along the ground to the fireplace and an explosion would then follow and the room would be filled with one sheet of flame Dr William Pinck, the medical officer to the workhouse, stated that he was not aware before the accident that there were three bottles of ether in the cupboard of the surgery," and that when they were received they ought to have been taken to the store in another part of the building The superintendent nurse, Miss Evans, was not well on the day on which the ether was received and probably Nurse Barker put them in the cupboard as she was next in charge She told Dr Pinck that she lifted the first bottle by the neck and showed it to Miss Evans Her words as reported were "In attempting to put it back I knocked it against another bottle and broke it and all fell down on to the ledge below Instantly there was a flame Dr Pinck thought that ether ought not to be kept in large quantities in such bottles The jury returned a verdict of "Accidental death" and recommended that ether should be kept in stronger bottles and placed under the Petroleum Act, and further that there should be a better system adopted at the Rochdale Workhouse of receiving medical drugs No explanation was given in the report of the fact that the superintendent nurse seems practically to have had charge of the surgery or any statement made as to how and by whom the dispensing of the medicines for the inmates was carried out This unhappy

among themselves for their own protection and for the good of the profession and the public I heartily welcome their zeal and am ready to cooperate with them and to urge the Association to do so That I have always been anxious to encourage them in taking the reins of the Association into their own hands and in availing themselves of a predominant influence in its work is testified by the fact that it was I who in May, 1890, designed the new constitution of the Association which transferred the ruling power to elected councillors, two-thirds of whom are provincialists, and it has always been a source of regret and disappointment to me that they have to a great extent failed to avail themselves of the powers thus conferred on them I therefore warmly advocate the holding of a general meeting once each year in each provincial centre which expresses its willingness to receive the Association and to make arrangements to do honour to the guests, and I do not think that the influence of the Association or its funds could be applied to a better use than assisting such an enterprise Yet I am totally averse from the proposition that Cork, Belfast, or any other city shall withdraw from Dublin the annual general meeting heretofore held on the first Monday in June in Dublin and I shall give my reasons:

First, I object emphatically to a breach of the custom which has governed the Association for 61 years The first Monday in June was for excellent reasons selected, at the foundation of the Society in 1839, by Carmichael, Kingsley, Benson, Jacob, and others of its founders, and as there is not another professional organisation in the kingdom which can boast of such a tradition I should like to maintain it even if the specified date were inconvenient Secondly, the date named was fixed because on it a gathering of the professional clans took place, and still takes place, in Dublin to assist in the elections at the College of Surgeons and in the annual general meeting of the Royal Medical Benevolent Fund Society If the day is appropriated for a provincial meeting the simple result will be that the practitioners interested in these functions will be absent from such meeting, including the majority of the metropolitan men Thirdly, it has always been the custom of the Association to remind the heads of departments, Members of Parliament, and other distinguished persons, as well as the Dublin Press, of the existence of the organisation by holding a public dinner to which these high functionaries were invited either officially by the Association or by members as their guests, and I maintain that the custom was very necessary to the well being of the organisation Needless to say that if the annual meeting in Dublin is abolished the Association will be "lost to sight, to memory dear," as far as these potential influences are concerned

For these reasons I urge that the provincialists should be content with a well organised public meeting at any other time of the year—to which meeting the parent Association should send delegates and contribute money, but that it should not interfere with the time honoured annual general meeting, from which, as I assert, we have gained substantial consolidation in the past From the last report of the Association I find that Dublin contributes nearly thrice as many members as any county in Ireland, very many of them being men who lend their names and their money without any personal interest whatever in the work of the Association Are we going to discourage that interest by taking away the one annual chance which is afforded to them to acquaint themselves with our work

I am, Sirs, yours truly,

ARCHIBALD HAMILTON JACOB, M D T C D,
F R C S Irel,
Ex President and Councillor Irish Medical Association.

April 5th, 1899.

"DIFFICULTIES UNDER THE NEW VACCINATION ACT."

To the Editors of THE LANCET

SIRS,—"Hon Sec Plaistow Medical Society" holds curious views on persuasion He thinks that he can persuade most parents by threatening them with the public vaccinator with his four insertions and with the law as embodied in an independent vaccination officer It reminds one of the way they persuaded Hooligan's mule "They coaxed it with a crowbar till the poor old mule was sore" This new "duty" of calling on the public and pressing professional services on them with these new weapons of persuasion will surely not be accepted by the majority of private practitioners

If I might venture to criticise the action of the body of which he is the honorary secretary it seems a strange outcome of a discussion on the new Vaccination Act to pass a resolution practically condemning the four insertions with glycerinated lymph Had the learned society nothing to say of the conscientious objector (often a parent who knows nothing of vaccination but who is on bad terms with the public vaccinator and cannot or will not pay for private vaccination)? Does it approve of highly trained medical men paying 1s visits and calling on all sorts and conditions of men with offers of professional services? Are we to understand that the persuasion theories emanate from the society? Secretaries are not supposed to write their private views over their official signature

Personally I fail to see how the new Act will secure efficient vaccination The Government dared not insert a clause fixing the minimum of efficient vaccination for they feared the homœopaths, and they dared not make vaccination really compulsory for fear of the anti vaccinator The only man whom they do not fear is the qualified medical practitioner, who will, they think, do anything for a fee The result is that they have attempted to throw the whole of the unpleasant part of the work on him He is to call on careless or unwilling parents to "persuade" them to have their children vaccinated and upon him they will probably try to throw the blame when small pox sweeps over unvaccinated England We ought to repudiate the duty now and throw the responsibility back on the parents who are the proper persons to bear it We have said what should be done and we are willing to do it, but it is going too far to hire us at 1s a visit to "persuade" the public and so make us act in a way which is inconsistent with the dignity of our profession

I am, Sirs, yours faithfully,
P P

April 3rd, 1899

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

Death of Major Evans, I M S—The Plague in Calcutta, Bombay, and Karachi—Hong-Kong again Declared Infected—The Plague Commission

I REGRET to record the death in Calcutta from plague of Major Evans, I M S He was resident physician and professor of pathology at the Medical College The deceased officer was extremely popular in his service and an additional sadness is lent to his untimely death by the fact that he was shortly to proceed home on leave after a spell of seven years on active duty

Plague seems to be steadily on the increase in Calcutta and the outbreak is developing very differently to that of last year Great consternation prevails and further special medical assistance is being obtained from Bombay In Bombay City 2312 deaths were registered for the past week, as against 2431 for the week previously, the normal number being about 513 There being only 1074 admitted cases of plague the excess of deaths over the normal means the successful concealment and false registration of over 800 cases The type of plague is still very bad and the percentage of mortality is very high The death rate for Bombay was 143 57 per 1000 per annum on the census (1891) population of 821,764

In consequence of the prevalence of plague in Karachi the local Government has notified the Province of Sind to be a suspected area At Karachi they are adopting again the system of detaining passengers at Mahr except those proceeding on business or who can be relied on to give an account of their movements

The chief plague authority of Poona city has issued a notice to the effect that segregation of persons from infected houses has been stopped Such persons will be kept three days under observation and allowed to re occupy their houses after they have been thoroughly disinfected There seem to have been more changes in plague regulations at Poona than at any other place in the Presidency and this last move places reliance solely on disinfection which has seemed to fail over and over again in destroying the infection of plague-stricken houses

The authorities at Lorenzo Marquez forbade the landing

parish council by the casting vote of the chairman adopted a resolution to the effect that—"This council will use the most careful discrimination where they relax the strict letter of the law in any case brought before them"

New Hospital at Braemar

The Deeside District Committee of the Aberdeen County Council have entered into contracts for the erection of an isolation hospital with three wards and other accommodation at the village of Braemar in the Deeside Highlands

April 4th.

IRELAND

(FROM OUR OWN CORRESPONDENTS)

The New Rules of the Local Government Board of Ireland in Reference to Nursing in Irish Workhouse Hospitals

THE dissatisfaction with the new rules in reference to trained nurses which was alluded to last week by your Belfast correspondent in connexion with the meeting in Londonderry is by no means confined to the north of Ireland Letters of complaint have appeared from all districts the latest news on the subject coming from Gorey in which town the board of guardians met on April 4th under the presidency of the Earl of Courtown for the purpose of appointing a trained night nurse for the workhouse infirmary It was found, however that there were no applications for the position although the guardians had advertised repeatedly during the past few months Several members of the board are reported to have expressed their high indignation at the action of the Local Government Board in refusing to sanction even the temporary appointment of an untrained nurse The retrospective action of the new rules has caused much difficulty Hitherto a trained nurse has been understood in Ireland to be a person who has received systematic training in a large clinical hospital under the supervision of a highly-trained lady superintendent for one year, who has passed the examination for nurses of the medical board, and who has before receiving her certificate been engaged in private nursing in connexion with the nursing home of the hospital for two other years The Local Government Board, following the rule which prevails in Scotland, now insists on a minimum training of three years Even the *Irish Times*, the most loyal of Irish newspapers, in a leading article on March 7th wrote "To insist now, as the Board are about to do, upon a minimum training of three years and to make any such rule retrospective appears to us to be going much too far" On the other hand Dr Moorhead of Cootehill, who has done so much to improve the condition of Irish workhouse infirmaries, wrote in the same journal on March 24th and after mentioning some of the well known causes why there are so few applicants of a high-class type for the post of workhouse hospital nurse went on to say "I, however, do not agree with those who think this a sufficient reason for lowering the standard of education which the Local Government Board have laid down It is the standard required by the Scottish Local Government Board for workhouse hospital nurses in that country and having been found suitable there should be equally so here

The Tralee Board of Guardians and Nurses in Union Hospitals

The recent circular of the Local Government Board directing boards of guardians to appoint in future as nurses for workhouse hospitals only such persons as have been regularly trained has met with some opposition, principally owing to the increased expenditure involved At the last meeting of the Tralee Board of Guardians the circular was under discussion and objections to it were raised on other grounds The nursing at the local union hospital has heretofore been done by nuns—the Sisters of Mercy Six of the sisterhood are engaged in that duty Four are paid £20 a year each by the guardians and the services of the other two are given gratuitously The medical officer reported that further assistance would be required and the guardians proposed to employ another Sister of Mercy, but the Local Government Board refused to sanct on the appointment unless it could be shown that the sister had gone through the course of training prescribed by the Board s circular Several of the guardians laid stress on the value of the religious ministrations of the nuns to the Roman Catholic patients who form the great majority of the inmates of the hospital It was also stated that nuns would have more influence than lay nurses in maintaining discipline One of the speakers mentioned that two of the Sisters of Mercy in the establishment have been nursing during the past 27 years, and he urged that the services of intelligent ladies with such large experience ought to be as valuable as those of lay trained nurses who may have only completed their period of probation Two of the Protestant guardians present spoke in eulogistic terms of the manner in which the hospital had been managed, and a resolution was unanimously adopted requesting the Local Government Board to reconsider their decision To the ordinary medical mind the desire of the Local Government Board to provide trained nurses in every instance for patients in union hospitals has everything to commend it and it would be regrettable in the extreme if anything were successful in thwarting the benevolent intentions which dictated the issuing of the circular But we must not close our eyes to facts and there is no doubt that a large volume of public opinion in Ireland is in favour of retaining the services of the Sisters of Mercy in those unions where they have been acting as nurses If the Local Government Board should yield to public opinion it might be considered that they would have no excuse for making different sets of rules for different unions But it might fairly be conceded that the system which has been in vogue for years has given to the Sisters of Mercy certain vested rights, and recognising the fact that expediency often demands that great reforms should be introduced gradually the Local Government Board might be well advised if whilst carrying out their rule as far as possible they were to fix a time limit after which they would decisively refuse to recognise any nurse whether belonging to a religious order or not unless she could produce satisfactory evidence that she had gone through the prescribed course of systematic hospital training

Dublin Public Health Committee

The usual meeting of the Public Health Committee took place on March 30th, when it appeared that the zymotic death rate was exceptionally low The committee adopted the suggestion of Sir Charles Cameron to forward to the Premier in view of further legislation the following recommendations contained in a paper by Mr R J Downes, President of the Pharmaceutical Society of Ireland relative to the distribution of poisons, which was read before the Public Health Congress —

(a) That "wholesale dealing" should be defined as (1) a sale to a person qualified to sell by retail (2) a sale to a manufacturer for use in the process of his business and (3) a sale to public bodies who usually buy by contract (b) That the principle of qualification of the proprietor should not be departed from. (c) That "poisonous substances" recognised to be poison should be added to the poison schedule. (d) That potent and reductive poisons in prescriptions should not be repeated except by the special direction of the prescriber (e) That poisons may not be kept or sold in the shop or room in which groceries and excisable liquors are sold or kept, or in bottles in common use for the containing of beverages. (f) That a legal as well as a moral obligation should rest on the public as to storing and distributing poisons.

The Adelaide Hospital Dublin

The annual meeting of the friends and supporters of the Adelaide Hospital took place on the afternoon of March 30th Lord Iveagh presided and in his opening speech paid a generous compliment to the medical profession In alluding to the amount of valuable time which hospital physicians and surgeons devoted to the service of the poor he mentioned that he himself was much struck some years ago by hearing from the late Sir Andrew Clark that his attendance in his hospital cost him more than £2000 a year Dr Wallace Beatty read the medical report and drew attention to the necessity for an increase in the accommodation of the out-patient department Dr Francis Heuston and Dr J W Moore, the President of the Royal College of Physicians of Ireland, both spoke strongly in favour of the construction of a new and up-to-date operation theatre

The Death-rate of Belfast

The Registrar General of Ireland, Dr Thomas Grimshaw, has intimated in a letter to the Lord Mayor of Belfast that he has given directions for the adoption of the figures 350 000 (instead of as formerly 308,960) as the basis for the calculation of the rates for vital statistics It is probable that the population of Belfast is even higher than these figures

The Rainfall of 1899

During March the rainfall, as taken at Seaforde,

fatality is worth recording as it may lead to more care being taken in other workhouses where matters may be a little lax and where, as at Rochdale, "there should be a better system of receiving medical drugs"

The Manchester Corporation and the Infirmary Site

Slowly, but whether surely or not time will show, steps are being taken to bring together representatives of the Manchester Corporation and of the trustees of the Manchester Royal Infirmary to discuss the question of the sale of the infirmary site to the corporation On March 29th there was a meeting of the Special Committee of the corporation which was appointed with reference to this question It was presided over by Sir John Harwood and the position of affairs was discussed at great length with the result that a small sub-committee was appointed and authorised to meet a similar number of representatives of the infirmary with the object of preparing a scheme which, it is to be hoped, will prove acceptable to both sides Now that the Ship Canal has turned the corner and entered on what may with great probability be expected—an era of prosperity—the City Fathers may look to the future with less anxiety than they have felt for some years past No doubt it would be an immense advantage on numerous grounds for the city itself to possess its finest site and also for the infirmary to be taken more into the outskirts, and the time seems almost ripe for the fulfilment of what has been talked of for so many years

Paraffin Lamp Accidents

An inquest was held on April 3rd at Altrincham touching the death of a little girl, two years of age, who died from burns received through the explosion of a paraffin lamp She had pulled the table cloth and with it the lamp to the ground The room was set on fire and the child was severely burned on the body and all her clothing was burnt A fall from the table to the floor would be a severe test for any lamp A juror asked if there was no possibility of improving this class of lamp—no doubt a cheap common lamp—so as to prevent these accidents He also said that a receiver of copper was far better than one of brass He had known one of brass to explode Inexpensive extinguishers have been devised and put on the market, but have not come into general use Views as to the proper degree for the flash point seem influenced by trade interests, but all will agree that if possible lamps should be made safe, so that they would not explode and that if upset the flame would be extinguished The coroner expressed "a hope that in the interests of the poorer classes there would be legislation on the subject"

The Drowning of an Owens College Student

An inquest was held on April 3rd at Port Erin on the body of Mr E T Townsend, a student of medicine at Owens College He went out with a friend for the purpose of "towing netting" in "a frail wooden square-bottom boat the property of the Liverpool Marine Biological Station at Port Erin" When returning to the shore the boat capsized and Mr Townsend was drowned He was a young man of much ability and it is melancholy to think of a valuable and promising life being lost when, according to the verdict, it need not have been The verdict of course was "Accidental death," but the jury added a rider to the effect that the boat was totally unfit to have been used by inexperienced persons

New Cottage Hospital at Colne

On April 1st the foundation stone of a cottage hospital for the borough of Colne was laid by Mr W P Hartley of Aintree It was decided last year to build a cottage hospital in celebration of the Jubilee and Mr Hartley, a native of the town, offered to build one at an estimated cost of £4000 on condition that £4000 more were subscribed as an endowment fund The offer was accepted At the ceremony of stone-laying he offered £1000 more if the public would raise the endowment fund to £5000, and no doubt this will be done

April 4th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS)

The Registrar General's Annual Report on the Births, Marriages, and Deaths in Scotland

DURING 1898 130 879 births were recorded, being 308 per 10,000 of the estimated population, or 3 08 per cent There were registered during the year 78,486 deaths in Scotland, the death rate being 184 in every 10,000 of its population, or 1 84 per cent The highest number of deaths was registered in the month of April, when they amounted to 8248 As regards the vaccination of children the returns for 1897 show that of the 129 014 children whose births were recorded in Scotland 108,378, or 84·005 per cent, were successfully vaccinated Certificates of postponement were granted in 2945 cases, or in 2 283 per cent, 568, or 0 441 per cent were stated to have been insusceptible to vaccination from some constitutional peculiarity, one, or 0 001 per cent, from having had small pox, and 255, or 0 197 per cent, were insusceptible from previous vaccination by persons who were not qualified to grant certificates to that effect Of the children born 13,552, or 10 504 per cent, died before being vaccinated and 3314, or 2 569 per cent, were removed from the district in which they were born or were unaccounted for for some other reason. By comparing these statistics with those of the previous 10 years it appears that the number successfully vaccinated is below the average of the previous 10 years, the proportion of postponed cases is above the average, the number constitutionally insusceptible is above the average, the number insusceptible from previous vaccination is below the average, the number who died before vaccination is above the average, as also is the number unaccounted for

University of St Andrews

At the half yearly meeting of the General Council of St Andrews University held on March 30th a motion was adopted to the effect that further action with respect to the draft ordinances providing Berry chairs of Anatomy and Physiology should be postponed, and that the teaching requisite for two *anni medici* should be continued for two sessions longer than at present arranged for

At a meeting of the University Court held on March 31st Mr A T Masterman, B A, D Sc, was appointed lecturer on Embryology It was resolved to afford assistance to Professor Marshall to enable him to teach Materia Medica in St Andrews in the summer session. Mr R S Mowat, M B, C M Edin, was appointed assistant to the lecturer on Medical Jurisprudence and Public Health in University College, Dundee, and Mr H. Llewellyn Heath, L S A, assistant to the professor of Materia Medica. Protests by St Andrews medical professors and lecturers against the holding of meetings of the medical faculty, &c., at University College were allowed to lie on the table The Court approved of two clauses recommended by the General Medical Council for the amendment of the provisions of the Medical Acts as to the penal and disciplinary powers over graduates

Aberdeen University

The number of medical students who have completed the final professional examination at this time—all under "new regulations"—is 25 In connexion with the graduation ceremony which takes place on Friday, April 7th, it has been arranged to have an anthropological exhibition, for which loan collections relative to New Guinea and Fiji have been sent by Sir W Macgregor, Governor of Lagos, late Administrator of New Guinea, and Colonel Allardyce of Aberdeen Sir W Macgregor, who is a medical graduate of Aberdeen University, has also given to his *alma mater* a number of specimens to form the nucleus of an anthropological museum For the year ended Sept 15th last the total income of the general fund of the University amounted to £14,024 and the expenditure to £13,803, leaving a balance of £221 At date of balance the liabilities under the head of "University Buildings Extension" stood at £15,549 17*s* 4*d* There are 69 candidates for the medical preliminary examinations of this week

Aberdeen and Vaccination

With reference to the recent resolution of the Aberdeen Parish Council as to the enforcement of the Vaccination (Scotland) Acts, the Scotch Local Government Board replied that no guarantee as to the purity of glycerinated calf lymph could be given except the *ipso facto* one that it was issued from the central institution and making intimation that the Board insist that the law relating to vaccination must be carried out in Aberdeen, and requesting that the parish council consider the whole question of proceeding against defaulters and send a definite answer to the Board's instructions within a week from March 24th The parish council met on March 31st to consider this communication A discussion took place and there were proposed various motions, including one that the Board's instructions be carried out *simpliciter* Ultimately the

this disease and others in ignorance of it, secondly sexual hypochondriacs who had become so after the appearance of their mental derangement, and thirdly, those convalescent from mental disturbance but whose complete recovery was retarded by some affection of the generative system As for those suffering from persecution mania general paralysis, or hysteria M Picqué declined altogether to interfere with them He had examined 63 female patients in an asylum and found that only seven were absolutely sound as regards their generative system He had operated in 18 cases and had met with 11 absolute successes, three improvements, three cases were neither benefited nor made worse, and one patient died The three cases remaining stationary were those of two hysterical women and one suffering from persecution mania, two classes of patients on whom M Picqué never operates now He had treated four other patients, giving in all 12 cured, six improved, three remaining stationary, and one who died In conclusion he said that patients must be carefully chosen, there must be some definite lesion to justify operation and in such cases it will often be found that the result will be a return to sanity

April 3rd

BERLIN

(FROM OUR OWN CORRESPONDENT)

Urban Death rates

AN essay on the mortality of several of the larger towns of Germany has been published by Dr Dreifuss of Ottweiler (Rhenish Prussia) in the *Vierteljahrschrift für Gerichtliche Medicin* The author on examining the death rates of Berlin, Munich, Nuremberg, Strassburg, Frankfort, Elberfeld, and Danzig has found that there has been a considerable decrease within the last 30 years Improved hygienic and social conditions are held to be the cause of this satisfactory result The report states that small pox has been comparatively seldom met with since 1874 when vaccination was made compulsory, the few cases observed since that year occurred almost exclusively in foreigners coming from countries without compulsory vaccination Enteric fever has also been less frequent, in consequence, it is supposed, of the suppression of private slaughter houses and the establishment of large public slaughter houses provided with modern hygienic arrangements The workmen's insurance laws have had a very good effect in diminishing tuberculosis by compelling the wage earning classes to join sick clubs, and thereby putting them in the way of taking better care of their health and providing them with medical attendance and nursing at an early stage when tuberculosis is not yet incurable The mortality from diphtheria has decreased considerably, but Dr Dreifuss is far from attributing this fact to the anti-diphtheritic serum alone. Without pronouncing an emphatic opinion he points out that there were occasional periods of nearly the same low death rate long before the antitoxin era The death rate from puerperal fever has decreased astonishingly in lying in hospitals obstetrical clinics, &c., whilst in cases attended at home the reduction of the mortality has not been very remarkable the explanation being that many of the midwives, especially the older ones, are not sufficiently trained in antiseptic methods Finally the report states that the death rate of those towns which had a very high mortality 30 years ago is diminished considerably at the present time, whilst in those places where public health was fairly good 30 years ago the subsequent improvement is less remarkable The differences between the towns are at the present time much less pronounced than they were 30 years ago

Yeast in the Treatment of Blennorrhœa

A new treatment for vaginal blennorrhœa is described by Dr Landau in the *Deutsche Medicinische Wochenschrift* His object was to discover a method which without being deleterious to the patient would nevertheless be capable of destroying gonococci and their toxic products In his experiments he acted upon the principle of substituting for the gonococci cultures of other micro-organisms of a greater vitality and power of propagation and he found that common yeast fulfilled these requirements Of 40 cases treated in this way the blennorrhœa was completely cured in more than half sometimes even after only one or two applications In a second series temporary relief was effected, but the blennorrhœa reappeared, in a third series the catarrhal affection was diminished, and in a few cases there was no apparent improvement although the patients declared that they felt better The yeast was obtained from a brewery and after being diluted with a small quantity of beer was injected into the vagina with an ordinary syringe and retained by a tampon closing the orifice of the canal The injection was repeated after two or three days and the treatment was continued for several weeks

A Nursing Exhibition

An exhibition of apparatus and appliances used in the nursing of patients is being arranged for by a committee under the honorary presidency of Dr Bosse Minister of Public Instruction, the active President being Dr von Leyden, Professor of Clinical Medicine in the University of Berlin The exhibition will be in connexion with the Congress on Tuberculosis to which allusion was made in my letter published in THE LANCET of March 11th (page 730), and it will be open from May 10th to June 18th The committee consists of leading hospital physicians and surgeons, army medical officers, and sanitarians The exhibition will be divided into two departments—one general and one special The first or general department will comprise models of sick rooms, apparatus for heating, ventilation, and disinfection beds, food for invalids, baths, wearing apparel, and books on nursing, the second or special department will comprise apparatus and appliances for the nursing of tuberculous patients, of sick children, of surgical patients, of the inmates of lunatic asylums, and of women in childbed, there will also be a section for nursing in time of war and in the colonies Such of the objects exhibited as possess exceptional importance or interest will be kept together so as to form a permanent museum of nursing

The Treatment of Tuberculosis

In the *Münchener Medicinische Wochenschrift* Professor Hoffa draws attention to the treatment of tuberculous affections of the bones, joints glands, and skin by inunctions of soft soap, a method which he has applied during the last 12 years in more than 200 cases Other means, such as injections of iodoform, plaster bandages, &c, must of course not be neglected, but he found them more efficacious when they were combined with the use of soap The patients' general state and appetite improved and multiple tuberculous affections of the bones and joints healed completely It is essential to use a very good quality of soap, of which from 25 to 40 grammes are rubbed on the body from the neck to the thighs two or three times a week After 15 minutes the soap may be wiped off The inunction is most conveniently done in the evening, as the patient ought to remain in bed for some hours afterwards The soap is said to act by its strong alkalinity, for on becoming absorbed it neutralises the lactic acid of the organism, the increased alkalinity of the blood stimulates metabolism, and in this way improves the general nutrition An increased quantity of urine is passed during the treatment A great advantage of this method is its cheapness which makes it specially useful for poor persons for whom good food, sea air, and other therapeutical resources are not available

April 3rd

ROME

(FROM OUR OWN CORRESPONDENT)

Palermo

THE true friends of Italy are not those who shut their eyes to the "prosaic reality" of her condition while flattering her *amour propre* by dwelling on her glorious past and the romantic interest which clings to her even yet, but those who are at pains to show her where her strength and her weakness lie and to put her on lines by which she may multiply the one and minimise the other THE LANCET has always tried to perform this latter rôle and in a series of articles, the result of prolonged and diligent investigation, has proved the splendid resources which she possessed in the North Sicilian Riviera—particularly in its beautifully situated naturally-favoured but hygienically backward city, Palermo [1] Once and again it has recalled her attention to the subject, and as recently as Feb 18th last, in a leading article entitled

[1] THE LANCET, May 29th and June 5th and 12th, 1897

co Down, was 1 53 inches, which added to that previously registered for January and February (9 08 inches) makes a total of 10 61 inches for this year, as against 4 82 inches for the same three months in 1898 This year then has been so far twice as wet as 1898

Royal Victoria Hospital, Belfast

The first general meeting of the authorities of the Royal Victoria Hospital under the new charter was held on March 31st to elect 60 members to form that part of the general committee which is to consist of annual subscribers of two guineas There were not that number present, so, as advised by their solicitor, it was decided that the report and statement of accounts for the four months ending Dec 31st, 1898, is not [at present required but that in lieu thereof a report and statement of accounts for the 16 months ending Dec 31st, 1899, should be submitted to the annual meeting to be held in the month of March, 1900 There is very considerable difference of opinion as to the qualification of the annual subscribers According to the new charter it is to be not less than two guineas, while in the old state of affairs it was one guinea Many people in Belfast hold that it would have been wiser to keep to the old qualification of one guinea There are at present so many charities that people of limited means find that they must divide their subscrip tions, and so they argue that instead of giving two guineas to one institution they will give one guinea each to two

The Water supply of Belfast

The Belfast Water Commissioners anxious to make their existing catchment areas as pure as possible, have been compelled to go to Parliament to obtain powers to purchase compulsorily the farms affecting these areas This will entail the disturbance of about 1000 people who will be fairly com pensated As regards the great Mourne scheme the Com missioners have wisely purchased the whole catchment area, so that no one without their permission can live in it, and it is hoped that by next autumn some of this new Mourne water will be available When this new scheme is finished it will settle the water supply of Belfast for many years to come, and the Commissioners expect then to supply also to the city hydraulic power as is now done in Glasgow

Close of the Winter Medical Session, Belfast

The winter medical session at the Queen's College and the Clinical Hospital came to an end on March 28th The summer session will begin on May 2nd, the Royal University examinations taking place largely in the interval

The Chair of Pathology at Glasgow University

Dr J Lorrain Smith, lecturer on pathology in Queen's College, Belfast, is a candidate for the vacant chair at the University of Glasgow

April 5th

PARIS

(FROM OUR OWN CORRESPONDENT)

Surgical Technique

AN important discussion took place upon March 22nd at the meeting of the Society of Surgery which gave an insight into the practice of some of the best known Paris surgeons as regards asepsis in operating M Quénu who opened the discussion gave it as his opinion that an aseptic condi tion of the surgeon's hands was the great thing to be aimed at, but that absolute asepsis is at present unattainable with the means at our disposal The surgeon should therefore use every effort to avoid contact with septic material, for even repeated washings will not remove all traces of infection Not only should the surgeon operate directly on his arrival at the hospital before touching any patient under his care, but he should also from the evening before abstain from any examination which might infect his fingers In the opinion of M Quénu gloves are of very real use and both he and his assistants use them in any septic operation or when there is any doubt as to the asepticity of their hands A mask is useless, but if the surgeon has a cold or is suffering from dental periostitis he might make use of one or at least wash out his nose and mouth with some antiseptic solution previously to operating Suture threads can be effectually sterilised in an autoclave, especially if care be taken to place in the autoclave together with the sutures some substance fusing at a temperature of 112°C as a means of control M. Quénu uses, almost exclusively, as material for sutures ordinary flax thread which is tolerated by the tissues just as well as silk and is more resistant It acts very well in tying the uterine arteries and in cases of hernia and gastro-enterostomy As a matter of principle the finer the thread used for sutures the better it is tolerated by the tissues Except in the case of gastro or entero intestinal anastomoses where the over hand (*surjet*) suture is used, M Quénu always makes use of the interrupted suture Finally, the less the quantity of tissue comprised in the ligature or suture the better the chance of success Out of 237 cases of severe operations —such as those for gastro enterostomy, acute appendicitis, choledochotomy, hydatid cysts of the liver, purulent pen tonitis, salpingitis, and nephrectomy—M Quénu has had, owing to the precautions taken, only 13 deaths, or a mor tality of 5 per cent M Bazy, who spoke after M Quénu had a different tale to tell, and he related the case of a laparotomy which he had performed with perfect success on the day after he had had septic operations or examinations to carry out—such as for instance, a rectal examination fo cancer or Estlander's operation M Tuffier agreed with M Quénu that complete asepsis of the hands was impossible to obtain Among the methods of as far as possible eliminat ing infection from the hands he mentioned the importance of never allowing septic products to dry on the hands With regard to gloves M Tuffier had used them for three months They were of the same kind as those used by M Quénu and they came from Leipsic, but it was not to be doubted that they very much diminished the delicacy of the touch and it was difficult when wearing them to guide an instrument safely in a deep wound He only used them for septic operations He did not con sider flax thread so suitable for sutures as did M Quénu, for it did not knot so easily as silk To insure good primary union all bleeding must be staunched before sewing up the wound, for the smallest blood clot formed an admirable culture medium for pathogenic organisms M Jalaguier has employed since 1887 indiarubber gloves on account of the intolerance of the skin of his hands to every kind of antiseptic solution, and he also has noticed loss of delicacy in his touch For sutures he uses catgut M Poirier uses indiarubber gloves, not for the operation itself but on the day previous for one or two hours, so as to provoke profuse perspiration which flushes out the pores of the skin and so extrudes sundry organisms

The Effects of Operation on the Mentally Unsound

At the meeting of the Society of Surgery held on March 29th M Picqué reminded the members that by means of some former researches he had been enabled to state that operations on the genital organs in women had no influence upon the appearance of mental disturbance After a study of this question for a period of 12 years M Picqué has now taken up that of the results of operations in women with a view to the cure of mental disturbances The surgical treatment of mental disease has for some time past occupied the attention of surgeons in foreign countries and has been for the most part vehemently opposed, while plenty of statistics have been adduced to show that surgical intervention in lunatics is useless M Picqué, however, does not consider that it is fair to class all these results under one heading On the contrary, he thinks that in well selected cases an operation is quite capable of restoring a lunatic to sanity and bodily health Of course, not every form of mental alienation is amenable to treatment and it is equally absurd to try to bring about a cure by taking away healthy organs M Picqué lays stress upon the frequency with which gynæcological affections are found in lunatics Statistics show that such affections occur in the proportions of 60, 80, or even 93 per cent M Picqué himself puts the figure at 88 per cent In his opinion mental afflictions are capable of cure to a much greater degree than is at present supposed Many practitioners are opposed to all forms of intervention in such cases, but M Picqué considers them to have been led astray by not leaving out of their calculations epileptic and hysterical patients, in whom surgical interference should be strictly avoided M Picqué has collected 66 cases, and he divides them into three groups —first, patients in whom the mental disturbance showed itself together with disease of the generative system some of the patients being aware of the existence of

hyperidrosis, which lasted often for two hours, could be easily stopped by putting the patient into a warm bath Professor Kaposi expressed the opinion that in this case, which was combined with kyphoscoliosis, the attacks were due to spinal disease, probably hydromyelia.

April 3rd.

Obituary.

JOHN BRUNTON, M D GLASG

ON March 25th Dr John Brunton died very suddenly at his residence, 16, Endsleigh street, London, aged 63 years On March 23rd, feeling somewhat unwell, he remained in bed, but on the following morning he was able to resume his work and to make his usual round of professional visits After dinner he became suddenly unconscious and despite the loving care of his son, Dr John Brunton, jun , and of his friend, Dr Frederick Roberts of University College he peacefully passed away at 6 P M on March 25th owing to cerebral hæmorrhage Dr Brunton s parents were well known and highly respected in the West of Scotland His father, William Brunton, LL.D , adopted teaching as his profession and filled important posts at Coatbridge, Falkirk, Campbeltown, and lastly at Paisley where for upwards of 30 years he was rector of the grammar school He was on terms of intimacy with Sir Walter Scott, Christopher North, and the "Ettrick Shepherd," and he died at the ripe old age of 83 years loved and revered by all who knew him His eldest son John (the subject of this notice) was born at Campbeltown, Kintyre, on May 16th, 1835, and he received his education at the University of Glasgow where he graduated as B.A. in 1855 M A. in 1856, and M D in 1860 His university career was in every way a brilliant one, for he not only highly distinguished himself as an art student but he carried off prizes in nearly every department of medical study, including chemistry anatomy, physiology, practice of medicine, midwifery, and forensic medicine After graduating in medicine he filled the posts of house surgeon and house physician at the Glasgow Royal Infirmary, subsequently studying medical practice at the principal schools on the Continent. Having made his home in London in 1862, his invariable self-denial and sympathy with others made him beloved by all with whom he came in contact, whether high or low, rich or poor In this way he soon made for himself a large and extensive medical practice and a wide circle of friends He filled numerous important public appointments in London, including that of medical adviser to various railway companies, surgeon under the Factories Act, &c , and he served as vice-president of the Obstetrical Society of London and of the Medical Society of London Although always a busy man and having his hands full of professional work he found time for a good deal of writing, and he has from time to time published records of interesting cases met with in his own practice, including acute hydrocephalus encysted placenta, pelvic hæmatoma, prolapse of the funis, and the treatment of nævus by ethylate of sodium He was also the inventor of the otoscope The high estimation in which he was held by his *alma mater* was testified by the fact of his having been retained as examiner for medical degrees in the University of Glasgow during the unusually long period of 12 years

With a thorough knowledge of his profession Dr Brunton possessed a large stock of common sense which is frequently such a valuable adjunct to medical treatment He was ever in sympathy with all that is true and noble in our profession and he never lost an opportunity of showing his abhorrence of anything savouring of baseness or quackery His cheery expression and genial manner were the outcome of his habit of always looking upon the bright side of things instead of upon the gloomy one and his constant desire appeared to be to make the world around him happier and more contented than he found it Amongst sportsmen he was well known as a keen angler and his holiday was never complete unless his fishing rod accompanied him. He was a loving and devoted husband and father and a staunch friend He leaves a widow and a grown up family to mourn their loss

GEORGE CHARLES WALLICH, M D , L R C S EDIN , SURGEON MAJOR, INDIAN MEDICAL SERVICE (RETIRED)

SURGEON-MAJOR GEORGE CHARLES WALLICH who died in his eighty fourth year on March 31st, received his professional education at the University of Edinburgh, where he graduated as Doctor of Medicine in 1836 He became a Licentiate of the Royal College of Surgeons of Edinburgh in 1837 and in the following year he entered the Indian Medical Service He served during the Sutlej campaign in 1842 and in the Punjab campaign in 1847, and on each occasion he was awarded a medal. He was Field Surgeon during the Sontal Rebellion in 1855-56 and he retired from the service in 1858 In 1860 Dr Wallich, on the recommendation of Sir Roderick Murchison and Professor Huxley, was attached as naturalist to H M S *Bulldog* on her voyage across the Atlantic to survey the sea bottom for the laying of the proposed Atlantic cable The materials obtained by the sounding operations were slender but in working them out Dr Wallich showed that he had already grasped all the principal problems of deep-sea research. His wide range of knowledge, the soundness and power of his reasoning and his originality and independence of thought enabled him to establish beyond the possibility of doubt, and for the first time, the hitherto unknown fact that the bathymetrical limits of animal life in the ocean extended to the great depth of 7500 feet, or one mile and a half, beneath the surface

For more than 20 years Dr Wallich continued to work in the same line of inquiry and in investigating collateral subjects, notably the life-history, structure, and relationships of those unicellular organisms which play so important a part in pelagic and bathybial life and the lithological identity of the ancient chalk formation and of the calcareous deposits in the ocean at the present time The Gold Medal of the Linnean Society of London was awarded to Dr Wallich last year by the Council in recognition of his researches into the problems connected with bathybial and pelagic life the Council being of opinion that such originality, accuracy, and keenness as an observer peculiarly fitted him for that honour

Dr Wallich was a Corresponding Member of the Royal Society of Liége He was the author of "Notes on the Presence of Animal Life at Vast Depths in the Ocean" (1860), "The North Atlantic Sea-bed" (1862), and of numerous papers on the biology and distribution of the lower forms of animal and vegetable life He contributed to the *Magazine of Natural History*, the *Quarterly Journal of Microscopical Science*, and various other scientific periodicals

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS —The following gentlemen passed the Second Examination (Anatomy and Physiology) of the Board in the subjects indicated on Monday, April 3rd —

Arnold Gregory Yorkshire College, Leeds Moses John Rowlands, David Havdn Evans and Trevor Howell, University College South Wales, Cardiff Arthur Herbert Norris and Frank Forrest, Owens College Manchester John Welsh and Harry Pierpoint, University College, Liverpool James Gilkison Higgins and John Leeming Stephenson, St. Mungo s College Glasgow John Hope Reford and John Alexander Douglas Radcliffe Queen s College, Belfast William Charles Bower Medical College and University Madras Albert Ernest Henton, Edinburgh University and St. Mary s Hospital Lewis William Huelin St Mary's Hospital Charles Clement Drabble, Firth College Sheffield Joseph Ebenezer Adams and Mathias Wilhelm Eberhard Widegren, St. Thomas s Hospital.

Anatomy only —Robert Alfred Pitter Yorkshire College Leeds and Rowland Wilbraham Hill, Owens College, Manchester

Physiology only —John Marie Sloan Duncan, London Hospital and John Philip Edmund Henery St. George s Hospital.

22 gentlemen were referred in both subjects, one in Anatomy only and one in Physiology only

Tuesday, April 4th

Arthur Ashmore Yorkshire College, Leeds John Milnes Pooley John Lemon Martin, and John Herbert Wells, St. Mary s Hospital Thomas Walter Scott and Evett Gordon Allport, Melbourne University Stanley Child, Cambridge University and Guy's Hospital Otto Charles Henry Leopold Moll, Durham University and Guy's Hospital and Mr Cooke s School of Anatomy and Physiology John Braithwaite, Gerald Wetherall Capon Hollist, and Harold Tipping Guy s Hospital Creswell Burrows, Walter Mersh Strong and Robert Dixon Browne, Cambridge University and St. Thomas s Hospital Herbert Melville Churchill, London

"Italy's Opportunity," indicated afresh the advantages still open to her in North Sicily, even in view of the steady determination of invalid travel to Egypt and the Nile It is somewhat disheartening, therefore, to read in the principal Palermitan organ, the *Giornale di Sicilia*, that the drinking water lately conducted from the fine source at Scillato has, on reaching the city, been found to be so polluted that the Director of the Board of Municipal Hygiene has had to intervene Analyses thereupon instituted have disclosed in the said water "un contenuto batterico esorbitante" (excessive bacterial impregnation) Inquiring how this could have been possible after the electric light of world wide publicity had been thrown on Palermo and its sanitary condition I receive the following in reply "The report on the expenditure incurred for the resanitation of our city reveals the discreditable fact that of the 30,000,000 lire (£1,200,000) accorded by loan to Palermo already 19,500,000 have gone and that of these only 11,000,000 (£440,000) have been devoted to their legitimate object—the sanitary rehabilitation of the city The other 8,500,000," adds my correspondent, "were squandered in directions quite extraneous to the purpose for which they were borrowed" A very painful impression has in consequence been produced—all the more that the Palermitan Town Council, being "in triste condizioni finanziarie" (deplorable impecuniosity), is constrained to reduce the remaining sanitary works to a minimum The late Agostino Bertani, the great Genoese surgeon and director in chief of ambulances in the successive Garibaldian campaigns, whose last work was his bestowal on the kingdom of its "Codice Sanitario," once exclaimed to me after a discussion on the Italian outlook, "Oh Italy, Italy!" That was 25 years ago, and after a quarter of a century the above information just received from Palermo makes me echo the bitter cry of my patriot friend

The Red Cross Afloat

Let me touch on a theme less unwelcome to lovers of Italy—her coöperation in the Red Cross movement which owes its inception to one of her medical sons, Dr. Palasciano, who first proposed such an organisation in Sicily during one of King Bomba's raids on his own liege subjects Year by year she is striving to perfect her system of "relief to the wounded in time of war" and during the disastrous Abyssinian campaign of March, 1896, her Red Cross contingents supplied the one redeeming feature amid the general *débâcle* From autumn to autumn she signalises the military manœuvres by some improvement, often as effective as it is ingenious, in the Red Cross service, and this year, on the occasion of the extensive evolutions of the army in the Alta Italia, she proposes to lay under contribution the *ospedali galleggianti* (floating hospitals) the "perfectioning" of which she has long been engaged upon The lakes, with their affluent and effluent waters, connected as these are with the great network of artificial irrigation in the Lombardo-Venetian territory form an admirable area for this novel and picturesque adjunct to Red Cross resources, and from the development of the system, after its preliminary trials some years ago culminating in the exhibition at Milan, there is every reason to expect that it will more than justify the anticipations of its promoters In the great autumnal heat and dust of the Lombard plain in which the manœuvres are to come off the very thought of a floating sanitary service on lake and waterway has something in it delightfully cool and refreshing The operations will be under the direction of the *Ispettore Capo* (inspector in chief of the services), Dr Paolo Postemski, *privat docent* in special pathology and surgery in the Roman School, whose work in Abyssinia in conjunction with the great orthopædist, Invernizzi, in rehabilitating the mutilated Ascars forms a bright page in the annals of humanitarian surgery

Professor Koch's Resumption of his "Malarial" Studies

About the middle of this month Professor Koch returns to Italy to complete his investigations into the etiology, the clinical history, the treatment and the prophylaxis of the so-called "malarial poison He will be accompanied, as he was last autumn, by his able coadjutors Dr Pfeiffer and Dr Kossel and will visit the chief "foci" of the disease These will include the island of Sardinia, the Tuscan Maremma the Pomptine Marshes, and the Maremma Ferrarese His headquarters will be in Rome where his experiments will be conducted as before in the "Laboratorio Governativo d Igiene" The Government (I am officially informed) will in every way facilitate the researches of its illustrious guest, placing at his disposal all requisites in *matériel* and *personnel*

Nemesis!

The Turinese Town Council, on the advice of its hygienic officers, used to publish the names and addresses of the dealers whose unsound articles of food had been impounded in the interests of the consumer That salutary regulation it has lately dropped and now I hear of alarming cases of poisoning in the subalpine capital due to the sale and ingestion of "funghi avvelenati" (poisonous mushrooms) Extensive seizures of the incriminated fungi have in consequence been effected, to be followed, it is to be hoped, by a return to the due "advertisement" of the nefarious vendors

Leo XIII and Professor Mazzoni

In acknowledgment of Professor Mazzoni's services during his recent illness the Pope has presented that eminent surgeon with a gold ring studded with brilliants, accompanying the gift with an autograph letter in the language of his Church

Easter Eve.

VIENNA.

(FROM OUR OWN CORRESPONDENT)

Congress of Internal Medicine

THE Sixteenth Congress of Internal Medicine will be held this year from April 11th to 14th at Carlsbad, the well known health resort The introductory address will be delivered by Professor Quincke of Kiel Two meetings of the congress will be devoted to discussion At the first a discussion on Insufficiency of the Heart Muscle will be opened by Professor L von Schroetter (Vienna) and Professor Martius (Rostock), at the second a discussion on Leukæmia and Leucocytosis will be opened by Professor Loewit (Innsbruck) and Professor von Minkowski (Strasburg) One meeting will be reserved for demonstrations and four other meetings will be available for the numerous papers to be read, of which 49 have been announced up to the present It is hoped that the famous Austrian watering-place will attract many visitors to the congress

Massage in Hungary

The Hungarian Minister of the Interior has issued an order by which the practice of massage by non medical persons is greatly restricted Such persons are prohibited from carrying out massage treatment of patients except under the supervision of a medical man who takes the responsibility, and they are furthermore prohibited from practising massage of the abdominal or sexual organs or the eyes Contraventions of this order will be punished by imprisonment and by a fine of 100 gulden (about £9 10*s*)

The late Outbreak of Plague

Last week some anxiety was occasioned in Vienna by a newspaper report stating that a servant at the bacteriological laboratory of the General Hospital had been taken ill and had been isolated Various rumours soon spread through the city and people became anxious lest a fresh outbreak of plague had occurred at the laboratory, but the matter was explained satisfactorily in a few hours Since the outbreak of plague last autumn everybody working in the bacteriological section of the laboratory when attacked by any febrile disease is kept under constant medical observation and is isolated in a special part of the hospital The patient whose case attracted attention last week exhibited febrile symptoms, but his illness proved to be a simple gastric catarrh and his isolation was discontinued on the next day

Hyperidrosis Spinalis Superior

At a recent meeting of the Vienna Gesellschaft der Aerzte Professor Kaposi showed a case of hyperidrosis spinalis superior in a boy, 15 years of age Increased perspiration of the face was noticeable even in the first years of the patient's life and for the last seven years there was marked hyperidrosis of the face, head, and trunk down to the sixth rib as well as of the arm down to the carpus He perspired copiously in these regions of the body in cold weather, but the perspiration was less marked in summer and after much walking or other bodily exercises it stopped It was observed that exposure to cold produced copious perspiration even though only a part of the body—one arm, for example—was slightly cooled by contact with cold air or by water, while the attacks of

n the closing of the Dalmellington Ambulance Class on larch 23rd, which had been conducted during the winter ionths by Mr R S Dunlop, M B Edin, the lecturer as presented with a silver tea kettle as a token of ie members appreciation of his services as instructor

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

University Degrees Bill

AGAINST the second reading of this measure General Laurie has put orth the following amendment—viz.: That this House declines to ace a stigma on foreign and colonial universities by enacting that iv graduate or holder of a degree of such university shall be required append to his name the title of such university while graduates universities in the United Kingdom are exempted from such quirement."

Lead Poisoning

When the House of Commons meets on Monday April 10th, r McKenna will ask the Home Secretary whether his attention has een called to the conclusions arrived at by Professor Thorpe and rofessor Oliver in their report on Lead Compounds in Pottery and hether in view of these conclusions the Factory and Workshop Bill ill contain provisions for prohibiting the use of lead for glazing rthenware in those particular kinds of ware in which it has been roved to be unnecessary for prescribing the use of lead in the form a fritted double silicate, for prohibiting the use of raw lead, and for rohibiting the employment of young persons and women as dippers, ipper assistants, ware cleaners after dippers, and glost placers in actories where lead-glaze is used.

Butter and Margarine.

In the Committee stage of the Sale of Food and Drugs Bill Sir Charles ameron proposes to move to repeal Subsection 3 of the Margarine Act 87 and in lieu thereof to enact as follows—'The word margarine all mean all substances whether compounds or not, prepared in itation of butter and containing not more than 10 per cent. of butter t and no such substance shall be lawfully sold except under the name f margarine but nothing in the Margarine Act, as amended by this ct shall be held to prohibit the sale of any admixture of margarine ith butter in any proportion above 10 per cent. of butter as a mixture f margarine and butter provided it be sold as such and provided that very provision of the Margarine Act as amended by this Act as to rending or marking of cans or the lettering of wrapping papers in hich margarine is sold, shall apply *mutatis mutandis* to the sale of ny such admixture of margarine with butter"

BOOKS, ETC., RECEIVED

BAILLIERE, TINDALL, AND COX, King William-street, Strand, London.
On Retro-peritoneal Hernia being the Arris and Gale" Lectures By B G A. Moynihan, M.S Lond. F.R.C.S Eng 1899. Price 7 6d.
The Analysis of Food and Drugs. By T H. Pearmain and C G Moor M.A. Cantab. Part II The Chemical and Biological Analysis of Water 1899 Price 5s net

BAUERMEISTER, F., Glasgow
Jahresbericht über Fortschritte auf dem Gebiete der Chirurgie Von Prof Dr Hildebrand, in Berlin III Jahrgang Bericht über das Jahr 1897 1899.

BLAKISTON'S P SON AND CO. Walnut street, Philadelphia.
Diagnosis by the Urine. By A. Memminger M.D Second edition Illustrated 1899

CHURCHILL, J & A., Great Marlborough-street, London
The Diseases of Children. By J F Goodhart M D Aberd F.R.C P Sixth edition. With the assistance of G F Still M.A. M D., M.R C.P 1899 Price 10s 6d.

GRIFFIN CHARLES AND CO Exeter-street Strand, London.
Practical Sanitation. By G Reid, M D., D P H., with an appendix on Sanitary Law by H Manley M B. Cantab. D P H Fifth edition. Illustrated. 1899 Price 6

HEWITTON H. 82, High Holborn London
Elements of Alkaloidal Etiology By A. M Brown, M.D 1899 Price 2 6d. net.

LANE, JOHN London.
Professor Hieronimus Translated from the Danish of Amalie Skram By Alice Stronach and G B. Jacobi. 1899 Price 6s

LAYTON C AND E Farringdon-street London
On Centenarians and the Duration of the Human Race By F E Young B.A. F R.A.S. 1899

LIPPINCOTT J B., Co Southampton-street, Covent-garden London.
An Experimental Research into Surgical Shock An Essay awarded the Cartwright Prize for 1897 By G W Crile A.M., M.D., Ph.D. Price 12s 6d.

LIVINGSTONE, E AND S Teviot-place, Edinburgh
Posological Tables: Appendix on Poisons Index of Diseases By Wm. Craig, M.D C.M., F.R.S E. New edition. 1899 Price 1s net
The Student's Practical Materia Medica. By Grace H Giffen, L.R.C.P L.R.C S Edin. 1899 Price 2s net.

MACMILLAN AND CO London
The Foundations of Zoology By William K. Brooks Ph.D, LL.D. 1899. Price 10s 6d.

MEDICAL PUBLISHING COMPANY Bartholomew Close London
On Villous Growths and the Common Affections of the Rectum. By Thos. Bryant M.Ch. (Hon), F.R.C.S Eng and Irel (Hon) 1899. Illustrated. Price 3. 6d

REDMAN PUBLISHING COMPANY Shaftesbury-avenue, London
Archives of the Roentgen Ray Edited by T Moore F R.C S and E. Payne M A. Cantab. February 1899 Vol. iii. No. 3. 1899 Price 4s net

RICHARDS, GRANT Henrietta-street Covent garden, London
The Effects of the Factory System. By Allen Clarke. Revised edition. 1899.
A Tabulation of the Factory Laws of European Countries. By Emma Brooke. 1898.

SMITH, ELDER, AND CO. Waterloo-place London.
The Hunterian Oration, 1899. By Sir W MacCormac, Bart, K.C V O 1899
Dictionary of National Biography Edited by Sidney Lee. Vol. lviii. Ubaldini—Wakefield. 1899. Price 15 net.

STEINHEIL, G Paris
Les Voies Centrales de la Sensibilité Generale Etude Anatomo-clinique Par Dr E. Long 1899

SWAN SONNENSCHEIN AND CO London.
The Plague in India An Impeachment and an Appeal. By C Godfrey Gümpel. 1899. Price 2s
Text-book of the Embryology of Invertebrates. By Dr E Korschelt and Dr K. Helder Translated from the German by Matilda Bernard and revised and edited by M F Woodward. Vol. ii. 1899 Price 12s

SWEET AND MAXWELL, Chancery lane, London
The Law of Inebriate Reformatories and Retreats. By Wyatt Paine Barrister-at law 1899 Price 6s

WRIGHT JOHN AND CO., Bristol.
The Medical Annual and Practitioner's Index for 1899. Seventeenth year Price 7s 6d. net

Magazines, &c., for April: Strand Magazine, Boy's Own Paper Girl's Own Paper Leisure Hour Sunday at Home, Ludgate Magazine, Westminster Review Contemporary Review Friendly Greetings, Myra's Journal, Pall Mall Magazine, Windsor Magazine, Cornhill Magazine, Blackwood's Magazine, Pearson's Magazine, English Illustrated Magazine, Knowledge Humanitarian, St. Peter's Magazine, New Century Review The Captain, North American Review

Appointments.

Successful applicants for Vacancies Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor not later than 9 o clock on the Thursday morning of each week, for publication in the next number*

ANDERSON A. C., M.B., C M Edin., has been appointed Assistant House Surgeon to the Taunton and Somerset Hospital.
ANDERSON A. J., M.B C.M. Edin. has been appointed Medical Officer for the Workhouse of the Staines Union
ASPINWALL, J F., L.R.C.P Lond. M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Marsden Sanitary District of the Huddersfield Union
BACK, A. H., L.R.C P Edin., M.R.C S has been appointed Medical Officer for the Acle Sanitary District of the Blofield Union
BARKER, W H., L.R.C P Edin., M.R.C.S., has been appointed Acting Medical Superintendent Ararat Lunatic Asylum, Victoria, Australia, vice W R Smith.
BARRETT E., L.R.C.P Lond., M.R.C.S has been appointed Medical Officer for the Maxey Sanitary District of the Peterborough Union.
BENNETT F G., L.R.C P L.R.C S Edin., L.F P S. Glasg., has been appointed, *pro tem.*, Acting Officer of Health for Albertonshire, Victoria Australia
BENNETT W G., L.R.C P Lond., M.R.C S., has been appointed Public Vaccinator for Worcester Union vice T P Gosling
BOYD, F T., M.D Lond M.R.C.S., has been re-appointed Medical Officer of Health for the Cirencester Rural District Council.
BROWNLEE, JOHN M.A. M.D Glasg., D.P.H. Camb. has been appointed Medical Officer of Health for the Island of Guernsey
BOUTFLOWER, ANDREW M.R.C.S has been appointed Honorary Surgeon to the Chetham Hospital Manchester vice F A. Heath.
CADMAN, A. W., F.R.C S., has been appointed Lecturer on Applied Anatomy in King's College London

Hospital Charles Rowan Hamilton Ball, Cambridge University and St. Bartholomew's Hospital Gerald Sydney Fwen St. Bartholomew's Hospital James Ryan Turle University College London; Matthew Robert Cecil MacWatters, King's College London Lionel Francis Lovell Keays and Gerald Conqueheare Cross, Middlesex Hospital Harold Ramsey Popham Baker St. George's Hospital and Eugene Christopher Whitehead, Westminster Hospital

13 gentlemen were referred in both subjects

Wednesday, April 5th

Richard Ernest Howell Leach Thomas Gibson, Harry William Sexton and Tom Jays, St. Thomas's Hospital Richard Coger Lawry, Percival Pasley Cole William Watkin Cadwaladr Jones, Norris Norman Allen Houghton Santiago Luis Pallant, and Charles Hy Bubb, Guy's Hospital Horace Arthur Cutler Cambridge University and Guy's Hospital; John Corbin St. Bartholomew's Hospital Frank Powell Connor Calcutta and St. Bartholomew's Hospital George Frederic Gill Otago University and St. Bartholomew's Hospital Hugh Bernard Willoughby Smith, London Hospital Percy George Reilly, London Hospital and Mr Cooke's School of Anatomy and Physiology Reginald H Bernard Ellis Hughes George Jewel Evans, and Francis Haylett Smith St Mary's Hospital Thomas Miller Neatby, Lawrence Charles Hunt and Stanley Parkes Mummery St. George's Hospital Wilfrid Boothby Blandy Eric Bayley and Faustin Marcel Boclet, Charing-cross Hospital John Alexander Drake King's College London and John Parker Ellerington and Harold Rundle FitzNettle University College London.

Eight gentlemen were referred in both subjects.

VICTORIA UNIVERSITY —At the degree ceremony on March 29th the following candidates were presented —

Bachelor of Medicine and of Surgery —Second-class honours John Craig Wilfrid Henry Richardson and Oswald Hampson Woodcock Owens College —John White Aldred, Owens College Thomas Taylor Bark and John Turner Grierson University College Thomas Wheeler Hart and John Eldridge Healey Owens College William Saville Henderson and John Edward Whitley McFall, University College Thomas O Neill, Owens College John Arthur Reed, Yorkshire College and Graham Renshaw Owens College.

At the Second Examination held in March in the Faculty of Medicine the following candidates were successful —

A Anatomy and Physiology —John Acomb, Yorkshire College F H S Ashworth Owens College Herbert Bates and J L Beddoes, University College H M Birkett and J W H Brown Yorkshire College Fred. Bullough Owens College W H Canter Yorkshire College J B Cook, J F Corson J M Cort, E N Cunliffe, Tom Eastham and J E Floyd Owens College J A C Forsyth Yorkshire College H L Fox Owens College G W Gehlerd, University College; D G Gellatly Owens College; V J Glover University College P H Green and J W Greenwood Owens College Frederick Griffith, University College W S Holmes, Owens College W L Maccormac, Yorkshire College Charles Mackey, Owens College C T Matthews, Yorkshire College J S W Nuttall and T F Pugh University College Arthur Richmond, Owens College Edwin Saville, Yorkshire College F R Sawdon and G H Shaw Owens College Robert Smalles Yorkshire College *H G Tansley, H C Waterhouse, Alwyn Wharton and B M. Wilson Owens College F P Wilson University College and J G Woolham, Owens College

B Materia Medica and Pharmacy —C W S Boggs, Yorkshire College S B Brontnall Owens College J C Caley, Yorkshire College A C Clarke Owens College A M Deane and J A C Forsyth Yorkshire College P T Harding Owens College J L Hawkes University College F W Hayes Yorkshire College G R. Heath, Marshall Hooper and S B Mehta, Owens College T B O Donoghue and M B Potts, Yorkshire College S W Swindells, Owens College and M. G L Walker and F W B Young Yorkshire College.

* Awarded University Scholarship

UNIVERSITY OF GLASGOW —The following have passed the third professional examination for the degrees of Bachelor of Medicine (M B) and Bachelor of Surgery (Ch B) in the subjects indicated (P, Pathology, M, Medical Jurisprudence and Public Health) —

Matthew Aikman M.A. (P), George Arthur (P * M) Gavin Barbour (P M), James Ossler Barclay (P M) Thomas Thomson Bathgate (P, M.) Alexander Binning (P), Harry Egerton Brown (P M) William Herbert Brown (P) John Douglas Brownlie (P *) William Adam Burns (P M), Thomas Carruthers M A. (P M.), Edward Provan Cathcart (P), John Thomson Clark (P * M.), Robert Clark (P), Charles Peter Garvie Crichton (P, M.) Charles Campbell Cuthbert, M.A. (P * M) Archibald William Wallace Davidson (P.,* M.) David Cur Douglas (M.) John Downie (P) Leonard Findlay (P *), Alexander Fraser M A. (P *) Matthew William Fraser (P M.) Gilbert Garrey (P M), Edward Gillespie (P M) Hyam Goodman M A. (P, M) Charles Aikman Gourlay, M A. (P) Charles Herbert Gunson (P) Archibald Wilson Harrington (P M) James Macpherson Henry (P) Isaac Mackay Huey (P M), Norman Maclean Leys (P, M), James Dunlop Lickley (P *) Donald M'Farlane Livingston (P *), John Lockhart (P M) Alexander Logan (P) Davin Dale Logan (P M.) Robert Lunan (P M), Jacob Mains (P), Andrew Mair (P *) Robert M Nab Marshall (P) Allan Martin M A, B Sc. (P) James Millar M A. (P, M.) Norman M Leod Miller (P M) Peter Moir (P M) Daniel Morrison (M), Alexander Munro (P) Anderson Gray M Kendrick (M.) George Steventon M Kinnon (P), James Mackinnon (P) Alfred Robert Maclurkin (P, M.) Burgess M Lhee (P M) Duncan Mackenzie MacRae, M.A. (P M) Thomas Neill (P M.) William Barr Inglis Pollock (P *), Peter Mackenzie Reid (P), John Duncan Richmond (P M.*) David Russell (P) James Scott M.A. (M) Edgar William Sharp (P M) James Shearer (P M), David Ap Simon (P), John Strathearn (P M.) Robert Taylor (P M), James Cameron Turnbull (P), George White (P *) Alexander Wilson (M *), Thomas Watson Wilson (P, M), Hugh Patrick Wright (P) and John Young (P *).

Women —Auguste Boyes (P., M), Gertrude Jane Campbell (P M) Lila Stephenson Greig (P *) Mary Forbes Liston (P * M.), Jean Marion Farie Marshall (P., M) Karen Margrethe Myhre (P.), and Christian Cleland Wood Smith (P M)

* Passed with distinction.

The following have passed the Second Professional Examination for the degrees of Bachelor of Medicine (M B) and Master in Surgery (C M) —

Robert Cumming B D George Wardlaw Milne and Alexander M Donald Nevin

The following have passed the Third Professional Examination (Regional Anatomy and Materia Medica) for the Degrees of Bachelor of Medicine (M B) and Master in Surgery (C M) —

Thomas Holmes and James Duncan Wilson

PROPOSED HOME FOR INCURABLES AT PLYMOUTH —At an influential meeting held at Plymouth on March 29th it was decided to establish a home for incurable patients at Plymouth, and a committee was appointed to prepare a scheme for the purpose to be submitted to a public meeting to be held shortly

DR A PATTON who has for over 25 years been medical superintendent of Farnham House Asylum, Finglas, Dublin, having retired from the management of that institution, one of the oldest of its class in the kingdom, is succeeded by Dr W R Dawson who has for some years been his colleague in the asylum and was formerly assistant medical officer at Morningside Asylum

MEDICAL MAGISTRATES —The following appointments as magistrates have been made for the colony of New South Wales Mr G V Gilray, M B Edin, of Nyngan, Mr R H Todd, M D Dub, F R.C S Irel, of Sydney, and Mr Donald Luker, M B, Sydney, has been appointed Deputy Licensing Magistrate of the Licensing Court for the Licensing District of Brewarrina

ROYAL COLLEGE OF SURGEONS IN IRELAND —The following is the prize list for the winter session 1898-99 Descriptive Anatomy Junior—Mr J Cockburn, first prize (£3) and medal, and Mr R G Allen, second prize (£1) and certificate Senior—Mr A Charles, first prize (£3) and medal, and Mr T A Dillon, second prize (£1) and certificate Practical Anatomy First year—Mr R G Allen, first prize (£3) and medal, and Mr R W Burkitt, second prize (£1) and certificate Second year—Mr A Charles, first prize (£3) and medal, and Mr C W Ewing second prize (£1) and certificate Third year—Mr C R Boyce, first prize (£3) and medal, and Mr J F Peart, second prize (£1) and certificate. Practice of Medicine Mr J P Byrne, first prize (£3) and medal, and Mr T J Tallon, second prize (£1) and certificate Surgery Mr J S P Stewart, first prize (£3) and medal, and Mr J P Byrne and Mr W R Meredith (equal) second prize (£1) and certificate Midwifery Mrs H L. Hennessy, first prize (£3) and medal, and Mr J. S P Stewart, second prize (£1) and certificate Physiology Miss M J Shire, first prize (£3) and medal, and Mr A. Charles, second prize (£1) and certificate Chemistry Mr T Keogh, first prize (£3) and medal, and Mr G G Tabuteau, second prize (£1) and certificate Pathology Mr J F Peart, first prize (£3) and medal, and Mr H Grabb, second prize (£1) and certificate Physics Mr W Ormsby, first prize (£3) and medal, and Mr A Ellenbogen, second prize (£1) and certificate The summer session will commence on Monday April 10th

PRESENTATIONS TO MEDICAL MEN — On March 20th, at the Moss street Schools, Blackburn, the students of the ambulance class presented Mr J W Lax, L R C P, L R C S Edin, of Whalley New road, with a walking stick in recognition of his services as lecturer — On March 14th a large assemblage from Sharnbrook and representatives from the district met in the Schoolroom, Sharnbrook, to present Mr C Hicks, L R C P & S Edin, &c., on the occasion of his leaving the neighbourhood, with two silver plated entrée dishes, a large silver plated soup tureen, together with a hunting crop with silver mounts, the soup tureen bearing this inscription "Presented to Charles Hicks Esq, L R C S by the inhabitants of Bolnhurst, Bletsoe, Felmersham, Knotting Milton Ernest, Pavenham, Odell, Risoley, Sharnbrook, Souldrop, Thurleigh, and Wyming ton, as a token of their hearty appreciation of services rendered with great skill, assiduity, and kindness"—

On the closing of the Dalmellington Ambulance Class on March 23rd, which had been conducted during the winter months by Mr R S Dunlop, M B Edin, the lecturer was presented with a silver tea kettle as a token of the members appreciation of his services as instructor

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS

University Degrees Bill

AGAINST the second reading of this measure General Laurie has put down the following amendment—viz. That this House declines to place a stigma on foreign and colonial universities by enacting that any graduate or holder of a degree of such university shall be required to append to his name the title of such university while graduates of universities in the United Kingdom are exempted from such requirement"

Lead Poisoning

When the House of Commons meets on Monday April 10th, Mr McKenna will ask the Home Secretary whether his attention has been called to the conclusions arrived at by Professor Thorpe and Miss Oliver in their report on Lead Compounds in Pottery and whether in view of these conclusions the Factory and Workshop Bill will contain provisions for prohibiting the use of lead for glazing earthenware in those particular kinds of ware in which it has been proved to be unnecessary for prescribing the use of lead in the form of a fritted double silicate, for prohibiting the use of raw lead and for prohibiting the employment of young persons and women as dippers, dipper assistants ware cleaners after dippers, and glost placers in factories where lead-glaze is used.

Butter and Margarine

In the Committee stage of the Sale of Food and Drugs Bill Sir Charles Cameron proposes to move to repeal Subsection 3 of the Margarine Act 1887 and in lieu thereof to enact as follows:— The word margarine shall mean all substances whether compounds or not, prepared in imitation of butter and containing not more than 10 per cent. of butter fat and no such substance shall be lawfully sold except under the name of margarine but nothing in the Margarine Act as amended by this Act shall be held to prohibit the sale of any admixture of margarine with butter in any proportion above 10 per cent. of butter as a mixture of margarine and butter provided it be sold as such and provided that the provision of the Margarine Act as amended by this Act as to branding or marking of cans or the lettering of wrapping papers in which margarine is sold, shall apply *mutatis mutandis* to the sale of any such admixture of margarine with butter"

BOOKS, ETC., RECEIVED

BAILLIÈRE, TINDALL, AND COX, King William-street, Strand, London

On Retro-peritoneal Hernia: being the Arris and Gale" Lectures. By B. G A. Moynihan, M.S Lond. F R C S Eng 1899 Price 7s 6d.

The Analysis of Food and Drugs. By T H. Pearmain and C. G Moor M.A. Cantab Part II The Chemical and Biological Analysis of Water 1899 Price 5 net.

BAUERMEISTER, F., Glasgow

Jahresbericht über Fortschritte auf dem Gebiete der Chirurgie Von Prof Dr Hildebrand in Berlin III Jahrgang Bericht über das Jahr 1897 1898.

BLAKISTON'S, P., SON AND CO Walnut street, Philadelphia.

Diagnosis by the Urine. By A. Memminger M.D Second edition Illustrated. 1899

CHURCHILL, J & A. Great Marlborough-street, London

The Diseases of Children. By J F Goodhart, M D Aberd F.R.C P Sixth edition With the assistance of G F Still M.A., M.D M.R.C P 1899 Price 10s 6d

GRIFFIN CHARLES AND CO Exeter-street Strand, London.

Practical Sanitation By G Reid M D., D P H., with an appendix on Sanitary Law by H Manley M B Cantab. D P H Fifth edition. Illustrated. 1899 Price 6s

KINIPTON H. 82, High Holborn London

Elements of Alkaloidal Etiology By A. M Brown, M.D 1899 Price 2s 6d. net.

LANE, JOHN London

Professor Hieronimus. Translated from the Danish of Amalie Skram. By Alice Stronach and G B Jacobi 1899 Price 6s

LAYTON C. AND E Farringdon-street, London

On Centenarians and the Duration of the Human Race. By F D Young B A. F R.A.S. 1899

LIPPINCOTT, J B Co Southampton-street, Covent garden London

An Experimental Research into Surgical Shock: An Essay awarded the Cartwright Prize for 1897 By G W Crile A.M M D Ph.D Price 12s 6d

LIVINGSTONE, E AND S Teviot place Edinburgh

Posological Tables: Appendix on Poisons Index of Diseases By Wm Craig M D C.M F.L.S L. New edition. 1899 Price 1s net

The Student's Practical Materia Medica. By Grace H Giffen, L.R C P L.R.C S Edin 1899 Price 2s net

MACMILLAN AND Co London

The Foundations of Zoology By William K. Brooks Ph.D, LL.D 1899 Price 10s 6d

MEDICAL PUBLISHING COMPANY Bartholomew Close London

On Villous Growths and the Common Affections of the Rectum By Thos Bryant M Ch (Hon) F.R.C.S Eng and Irel (Hon) 1899 Illustrated. Price 3 6d

REDMAN PUBLISHING COMPANY Shaftesbury-avenue London

Archives of the Roentgen Ray Edited by T Moore F R C S and E. Payne M A. Cantab. February 1899 Vol. III., No 3. 1899 Price 4s net

RICHARDS GRANT Henrietta street Covent garden London

The Effects of the Factory System. By Allen Clarke Revised edition. 1899

A Tabulation of the Factory Laws of European Countries By Emma Brooke 1899.

SMITH ELDER, AND Co Waterloo-place London

The Hunterian Oration, 1899 By Sir W MacCormac, Bart, K C V O 1899

Dictionary of National Biography Edited by Sidney Lee. Vol. lviii Ubaldini—Wakefield. 1899. Price 15 net.

STEINHEIL, G Paris

Les Voies Centrales de la Sensibilité Générale Etude Anatomo-clinique Par Dr F Long. 1899

SWAN SONNENSCHEIN AND Co London.

The Plague in India: An Impeachment and an Appeal. By C Godfrey Gumpel. 1899 Price 2.

Text book of the Embryology of Invertebrates. By Dr E Korschelt and Dr K. Heider Translated from the German by Matilda Bernard and revised and edited by M F Woodward Vol II 1899 Price 12s

SWEET AND MAXWELL, Chancery lane London

The Law of Inebriate Reformatories and Retreats By Wyatt Paine Barrister-at law 1899 Price 6s

WRIGHT JOHN AND Co, Bristol

The Medical Annual and Practitioner's Index for 1899 Seventeenth year Price 7s 6d. net

Magazines &c. for April: Strand Magazine Boy's Own Paper Girl's Own Paper Leisure Hour Sunday at Home Ludgate Magazine, Westminster Review Contemporary Review Friendly Greetings, Myra's Journal, Pall Mall Magazine Windsor Magazine, Cornhill Magazine Blackwood's Magazine Pearson's Magazine, English Illustrated Magazine Knowledge Humanitarian, St. Peter's Magazine New Century Review The Captain North American Review

Appointments.

Successful applicants for Vacancies Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor not later than 9 o clock on the Thursday morning of each week, for publication in the next number*

ANDERSON A C M.B C M Edin., has been appointed Assistant House Surgeon to the Taunton and Somerset Hospital.

ANDERSON A. J., M B C M. Edin has been appointed Medical Officer for the Workhouse of the Staines Union

ASPINWALL, J F., L.R.C.P Lond. M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Marsden Sanitary District of the Huddersfield Union

BACK, A. H., L.R.C P Edin M R C S has been appointed Medical Officer for the Acle Sanitary District of the Blofield Union

BARKER, W H., L.R.C P Edin M.R.C S., has been appointed Acting Medical Superintendent Ararat Lunatic Asylum, Victoria, Australia vice W B Smith

BARRETT E L.R.C.P Lond., M.R.C S., has been appointed Medical Officer for the Maxey Sanitary District of the Peterborough Union

BENNETT F G L.R.C P L.R.C S Edin., L.F P S. Glasg., has been appointed, *pro tem.*, Acting Officer of Health for Albertonshire, Victoria Australia

BENNETT W G L.R.C P Lond., M.R.C S., has been appointed Public Vaccinator for Worcester Union vice T P Gosling.

BOND F T., M D Lond, M R.C.S., has been re-appointed Medical Officer of Health for the Cirencester Rural District Council.

BROWNLEE, JOHN M.A., M.D Glasg., D P H. Camb. has been appointed Medical Officer of Health for the Island of Guernsey

BOUTFLOWER, ANDREW M R.C.S has been appointed Honorary Surgeon to the Chetham Hospital Manchester vice F A. Heath.

CADMAN A W, F R C S., has been appointed Lecturer on Applied Anatomy in King's College London.

COANE JAMES, L.R.C.P. Edin., L.R.C.S. Irel. has been appointed Officer of Health for Yackandandahshire Victoria Australia, vice A. Mueller

DAWSON, W. R. M.D. Dubl. M.R.C.P. Irel., has been appointed Medical Superintendent, Farnham House Asylum, Finglas, Dublin.

DERAVIN, H. A., M.B., Ch.B. Melb., has been appointed, *pro tem.*, Acting Officer of Health for Inglewood Borough, Victoria, Australia.

DICKSON, W. M.B., C.M. Edin. has been appointed Public Vaccinator for the Hungerford Sanitary District

DUNBAR, A., M.B. C.M. Edin. has been appointed Medical Officer for the Acomb Sanitary District of the Great Ouseburn Union

FAUSSETT, H. J., M.D. Dubl. M.Ch. has been re-appointed Medical Officer of Health by the Tamworth Rural District Council.

FLOWER, FREDERICK, M.R.C.S. L.S.A., has been re-appointed Medical Officer for the Corsley District by the Warminster Board of Guardians.

GOODWYN, HENRY, L.R.C.P., L.R.C.S. Edin., has been re-appointed Medical Officer for the Islington Sanitary District of the Newton Abbot Union.

GRIMBLY, R. H. M.R.C.S. has been re-appointed Medical Officer for the Ipplepen Sanitary District of the Newton Abbot Union

HOARE, MORLEY, L.R.C.P. L.R.C.S., L.F.P.S.G. has been appointed Clinical Assistant to the Birmingham and Midland Hospital for Skin and Urinary Diseases

HORN, ARTHUR E., B.Sc. Lond. M.R.C.S. L.R.C.P. has been appointed Assistant Medical Officer to the Chelsea Infirmary S.W.

HOSEGOOD, SAMUEL, M.R.C.S., L.S.A. Lond. has been appointed Medical Officer to the Swinton and Clifton District of the Barton upon Irwell Union vice John Williams deceased.

KELYNACK, T. N., M.D. Vict. M.R.C.P. Lond., has been appointed Honorary Pathologist to the Manchester Clinical Hospital for Women and Children

LIVERSIDGE, WILLIAM, M.B. Lond., M.R.C.S. L.R.C.P. Lond., has been appointed Senior House Surgeon at the Blackburn and East Lancashire Infirmary vice Robert Y. Aitken resigned.

MACKIE, FREDERICK PERCIVAL, L.R.C.P. Lond., M.R.C.S., has been appointed Resident Medical Officer to the Ham-green Fever Hospitals and the Bristol City Hospitals.

McCLEAN, JOHN F. M.R.C.S. L.R.C.P., has been appointed Surgeon Superintendent of the British Hospital, Constantinople, vice J. Patterson, resigned.

PARRY, W. H. M.B., C.M. Glasg. has been appointed Medical Officer for the Workhouse and Betws y Coed and Trefriw Sanitary District of the Llanrwst Union

RABY, LEONARD, M.D. Durh. M.R.C.S. L.S.A., has been appointed Medical Officer of Health for Devizes vice E. N. Carless deceased

RUTTER, F. B. M.D. Durh. F.R.C.S. Eng., L.R.C.P. Lond. has been appointed Medical Officer for the Workhouse and the First Sanitary District of the Mere Union

SMITH, J. M. M.D. Glasg., D.P.H. Edin. has been appointed Parochial Medical Officer by the Dundonald Parish Council, vice W. Alexander

SOUTHEY, A. J. M.R.C.S. has been re-appointed Medical of Health by the Eton Urban District Council

TINSLEY, S. L.F.P.S. Glasg. has been appointed Medical Officer for the Huggate Sanitary District of the Pocklington Union.

WILSON, A. C. J. L.R.C.P. Edin. M.R.C.S. has been re-appointed Medical Officer of Health by the Thurlstone Urban District Council

WRIGLEY, R., M.R.C.S. has been re-appointed Medical Officer for the Bure Sanitary District of the Flegg Union.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

ASTON UNION.—Resident Assistant Medical Officer at the Workhouse Gravelly hill, near Birmingham. Salary £100 per annum with furnished apartments, rations, washing, &c. Subject to statutory deduction. Apply to the Clerk to the Guardians Union Offices, Vauxhall road, Birmingham.

BATH EASTERN DISPENSARY.—Resident Medical Practitioner. Salary £100 a year with furnished apartments, coals, gas, and attendance. Applications to Colonel F. V. Eyre, Hon. Sec. Rockville, Lansdown, Bath.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL, Edmund street, Birmingham.—House Surgeon for six months. Salary at the rate of £42 per annum, with board, lodging and washing.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House Surgeon. Salary to commence at £60 per annum, with board, washing, lodging &c. Apply to the Secretary, 15, Richmond terrace, Blackburn.

BOROUGH HOSPITAL, Birkenhead.—Junior House Surgeon. Salary £75 per annum, with board and lodging, but no wine, spirits or beer.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's inn road, W.C.—House Surgeon. Residence, board &c. in the hospital.

DARLINGTON HOSPITAL AND DISPENSARY.—House Surgeon, unmarried. Salary £140 per annum, with rooms in the institution, but applicant to board himself.

DRIFFIELD UNION.—Medical Officer for Weaverthorpe District of the Union. Salary £21 per annum, with certain extra fees.—Apply to the Clerk to the Guardians, Driffield.

GENERAL HOSPITAL, Nottingham.—Assistant House Physician for twelve months. Salary £50 with board, lodging and washing in the hospital.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway road, London.—Assistant Anæsthetist for six months. Salary at the rate of £10 10s. Also Surgeon to the Out-patients.

HARRIS PARISH COUNCIL.—Medical Officer and Public Vaccinator for the Southern Division of Harris. Salary £90. Other emoluments. Apply to Mr. T. Wilson, Solicitor, Lochmaddy, Clerk.

HEIGHAM HALL ASYLUM, Norwich.—Assistant Medical Officer.

HOSPITAL FOR WOMEN AND CHILDREN, Leeds.—Non-resident Surgeon for twelve months. Salary £90 per annum.

KNIGHTON UNION.—Medical Officer and Public Vaccinator for Llanbister District. Salary £80 per annum, with the usual extra medical fees.—Apply to the Clerk, Knighton, Radnorshire.

NORTHAMPTON GENERAL INFIRMARY.—Assistant to the House S. for six months. Board, lodging and washing provided, honorarium of £25 given.

ROTHERHAM HOSPITAL AND DISPENSARY.—House Surgeon for years. Salary 100 guineas, with rooms, commons, and washing. Also Assistant House Surgeon. Salary £30 per annum, with and washing.

ROXBURGH DISTRICT ASYLUM.—Assistant Medical Officer. £100 per annum, with furnished quarters, board, washing, attendance.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City road, London.—House Physician for six months. Salary at the rate of £40 per annum with board, lodging, and washing.

ROYAL INFIRMARY, Sheffield.—Junior Assistant House Surgeon. £50 per annum with board, lodging, and washing.

SCARBOROUGH HOSPITAL AND DISPENSARY.—Senior and Junior Resident House Surgeons. The Senior for 12 months at a salary of £[illegible] per annum, with board and lodging and the Junior for six m[illegible] at a salary at the rate of £50 per annum with board and lodging.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant Resident Surgeon. Salary £30 per annum, with board, lodging washing.

STAMFORD, RUTLAND AND GENERAL INFIRMARY, Stamford.—Surgeon for two years, unmarried. Salary £100 per annum, board, lodging and washing.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY.—Junior Resident Medical Officer. Salary for the first three months at the rate of £50 per annum and afterwards at the rate of £75 per annum with board and residence in each case. Applications to the Senior Resident Medical Officer 169 High-street, Stoke Newington, N.

STOCKPORT INFIRMARY.—Assistant House and Visiting Surgeon. £70 per annum, with board, washing, and residence. Also Junior Assistant House Surgeon. Salary £2 per mensem, with board, washing and residence.

VICTORIA HOSPITAL, Folkestone.—House Surgeon. Salary £80 annum, rising to £100, with board, residence, and washing.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Resident Obstetric Assistant for six months. Board and lodging in the Hospital provided.

WREXHAM INFIRMARY.—House Surgeon. Salary £30, with washing, and furnished apartments.

Births, Marriages, and Deaths.

BIRTHS

COOK.—On March 29th, at Newport-road, Cardiff, the wife of H. G. Cook, M.D. F.R.C.S. of a daughter (stillborn).

HAVELOCK.—On March 28th, at Sunnyside, Montrose, the wife of John G. Havelock, M.D. of a daughter.

INGRAM-JOHNSON.—On March 28th at South Moor, near Chester Street, the wife of R. E. Ingram-Johnson, L.R.C.P. Edin., L.R.C.S. Edin. &c. of twins (son and daughter).

LACE.—On March 27th at The Paragon, Bath, the wife of Frederick Lace F.R.C.S., of a son.

ST. LEGER.—On March 28th at Westbury, Purley, Surrey, the wife of Robert A. St. Leger M.B., of a daughter.

MARRIAGE

ABBOT-ANDERSON—SHAW.—On March 29th, at St. John's Church, Notting hill, William Maurice Abbot-Anderson M.B. B.S., of Wimpole-street, W. to Maude widow of the late James Ro[illegible] Shaw of Leeds.

CARDALE—DIBBEN.—On March 25th, at the Catholic Apostolic Church, Chelsea, Henry Jasper Cardale M.B. C.M., eldest son of Vice-Admiral C. S. Cardale of Penlee-gardens, Stoke, Devonport, to Bruce, third daughter of Joseph Shephard Dibben of Toller Do[illegible]

WHYTE—GRAY.—At the Parish Church, Dalkeith, on March 29th, the Rev. Andrew Gray, D.D., father of the bride assisted by the Very Rev. W. H. Gray D.D. uncle of the bride and the Rev. W. J. Gray B.D., Minister of Aberdour brother of the bride, J. Curtis Whyte, M.D. The Elms, Eskbank, to Mary, only daughter of Dr. Gray Minister of Dalkeith. At home May 3rd, 4th, and 5th.

DEATHS

DUNCAN.—On April 5th at 8, Henrietta-street, Covent Garden, J. Andrew Duncan M.B. Lond. in his 80th year.

HAWKINS.—On March 31st, at 3 Northernhay place, Exeter, Th[illegible] Hawkins, M.R.C.S., aged 68.

JACKSON.—On March 28th at 9, Evelyn terrace, Brighton, the residence of her youngest son, Frances, daughter of the late James Sw[illegible] ham of Wirksworth, and widow of the late Henry Jackson, su[illegible] of Sheffield, aged 83.

SQUIRE.—On April 2nd, at Danescombe, Ealing-common, W. [illegible] Squire M.D. F.R.C.P., aged 73 years.

TOMKYNS.—On March 24th, at Green Bank, West hill, St. Leonards, William Fancourt Tomkyns M.R.C.S., aged 74.

WALLICH.—On March 31st at Nottingham place, London, S. [illegible] Major George Charles Wallich, M.D. Retired List H.M.I.A., in his 84th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Stewart's Instruments.)

THE LANCET Office, April 6th 1899

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rain fall.	Solar Radia in Vacuo	Maximum Temp Shade	Min. Temp	Wet Bulb.	Dry Bulb	Remarks at 8.30 A.M.
Mar 31	30·25	S E	0·17	89	62	45	46	48	Raining
April 1	30 10	S W	...	91	66	45	51	53	Overcast
2	30·09	S W		79	59	50	50	51	Overcast
3	30·05	W	0·02	85	61	49	49	51	Overcast
4	30 11	S W	..	81	60	48	49	51	Cloudy
5	30 19	W	0·05	101	62	45	46	50	Fine
6	30·05	W	0·05	101	63	50	51	54	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS.

(DAY (10th).—London (2 P M) St. Bartholomew s (1.30 P.M), St. Thomas's (3.30 P M) St George s (2 P.M., Ophthalmic 1 15 P M), St Mary's (2.30 P M), Middlesex (1.30 P.M.), Westminster (2 P.M), Chelsea (2 P.M), Samaritan (Gynæcological, by Physicians 2 P M), Soho-square (2 P.M), Royal Orthopædic (2 P M), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P M.)

SDAY (11th).—London (2 P M), St Bartholomew's (1.30 P.M), Guy's (1.30 P.M), St. Thomas s (3.30 P.M), Middlesex (1.30 P M.) Westminster (2 P.M), West London (2.30 P M), University College (2 P M.), St. George s (1 P.M), St. Mary's (1 P M), St. Mark s (2.30 P M) Cancer (2 P.M) Metropolitan (2.30 P.M.), London Throat (2 P M. and 6 P M.), Royal Ear (3 P M.)

DNESDAY (12th) —St. Bartholomew s (1.30 P M.), University College (2 P.M.), Royal Free (2 P M.), Middlesex (1.30 P.M), Charing-cross (3 P.M.), St. Thomas s (2 P.M) London (2 P.M), King's College (2 P M), St Mary's (2 P M.), National Orthopædic (10 A.M.), St. Peter s (2 P.M.) Samaritan (2.30 P.M.), Gt. Ormond street (9.30 A.M.), Gt. Northern Central (2.30 P M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P M) Cancer (2 P M.)

URSDAY (13th) —St Bartholomew's (1.30 P.M.), St. Thomas s (3.30 P.M.) University College (2 P.M), Charing-cross (3 P.M.), St. George s (1 P.M.) London (2 P.M.), King's College (2 P M.), Middlesex (1.30 P M.), St. Mary s (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.) Chelsea (2 P.M), Gt. Northern Central (Gynæcological 2.30 P.M), Metropolitan (2.30 P M.), London Throat (2 P.M.), St. Mark's (2 P.M).

IDAY (14th).—London (2 P.M.), St. Bartholomew's (1.30 P M), St. Thomas s (3.30 P M.) Guy's (1.30 P.M.), Middlesex (1 30 P.M.), Charing-cross (3 P.M.), St George s (1 P.M) King s College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.) Chelsea (2 P M), Gt. Northern Central (2.30 P.M.), West London (2. 30 P.M.), London Throat (2 P.M. and 6 P M.)

FURDAY (15th) —Royal Free (9 A.M and 2 P.M.), Middlesex (1.30 P M.), St. Thomas s (2 P M.) London (2 P M.), University College (9.15 P M.), Charing-cross (3 P M) St. George s (1 P M.) St. Mary's (10 P.M.), London Throat (2 P.M.).

t the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic A.M.), the Royal Westminster Ophthalmic (1.30 P.M.) and the ntral London Ophthalmic Hospitals operations are performed daily

SOCIETIES

NDAY (10th).—MEDICAL SOCIETY OF LONDON —8.30 P.M. Clinical Evening Dr G E. Herman: Case of Recurrent Cancer of Breast cured by Oöphorectomy and Thyroid Extract.—Dr F R. Walters and Mr L. A. Bidwell: Cases of Lupus Erythematosus Cases will also be shown by Dr Calvert, Mr Battle, and others.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square) — 7 P M Council Meeting. 8 P.M. Discussion on Dr W Hunter s paper on the Relation of Dental Diseases to General Diseases. Papers:—Mr C. S Tomes A Remarkable Diseased Tooth —Mr C. B Keetley: Limitation of the Gape after Operations on the Cheek and Jaws.

ESDAY (11th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square W).—8.30 P M. Papers:—Mr G H. Makins: On Prevesical Hernia with the Relation of a Case in which Subacute Strangulation occurred.—Dr A. G Phear: The Clinical Examination of the Hæmic Leucocytes.

EDNESDAY (12th).—DERMATOLOGICAL SOCIETY OF LONDON (11 Chandos-street, Cavendish-square W).—5.15 P.M Demonstration of Clinical Cases

HUNTERIAN SOCIETY —8.30 P.M. Clinical Evening Cases will be shown by Dr F J Smith, Dr D Ross, Dr Herman, and other Fellows.

URSDAY (13th).—BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W) —8.30 P.M. Discussion on the Abdominal Causes of Death after Ovariotomy (introduced by Dr W J Smyly of Dublin).

IDAY (14th).—EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square W) —8 P M. Council Meeting. 8.30 P.M Ordinary Meeting

CLINICAL SOCIETY OF LONDON (20, Hanover-square W).—8.30 P M. Papers:—Mr W G Spencer: Wound of a large superficial Inguinal Artery in which the Blood was flowing from the Trunk to the Thigh.—Dr Bolleston and Dr C. Ogle Syphilitic Stenosis of the Bronchi.—Mr C. Lucas: Two Cases of Ununited Fracture of the Humerus caused by the Interposition of the Muscular Spiral Nerve between the Fragments.—Dr S West: The Skin Affections in Renal Disease.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

TUESDAY (11th).—ROYAL INSTITUTION OF GREAT BRITAIN —3 P M. Prof J C. Ewart: Zebras and Zebra Hybrids.

WEDNESDAY (12th)—THE SANITARY INSTITUTE. (Parkes Museum Margaret street W)—8 P M Discussion on Practical Hygiene Teaching in Elementary Schools (opened by Miss Alice Ravenhill)

NORTHERN AND MIDLAND DIVISION OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION (County Asylum, Hatton Warwick) —4 P M. Spring Meeting Discussion on the Nursing Staff in Public Asylums (opened by Dr Macphail) Paper —Dr Wilcox Some Cases of Insanity treated by various Animal Extracts.

THURSDAY (13th).—ROYAL INSTITUTION OF GREAT BRITAIN —3 P M Prof Dewar: The Atmosphere

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER'S NOTICES

THE INDEX TO THE LANCET

THE Index to Vol II of 1898, which was completed with the issue of Dec 31st, and the Title page to the Volume, were given in THE LANCET of Jan 7th

VOLUMES AND CASES

VOLUMES for the second half of the year 1898 are now ready Bound in cloth, gilt lettered, price 18*s*, carriage extra

Cases for binding the half-year s numbers are also ready Cloth, gilt lettered, price 2*s*, by post 2*s* 3*d*

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AUDACIOUS QUACKERY

WE read in the *Abergavenny Chronicle and Monmouthshire Advertiser* an account of an inquest held recently at the Abergavenny Asylum which presents points of interest. The name of the deceased was George Pearce, aged 34 years, of Yew Tree Cottage, Newbridge, who had been admitted four days previously to the asylum.

The evidence of Dr James Glendinning was to the effect that the deceased was, at the time of his admission in a very feeble and exhausted condition. He was depressed and very unwilling to speak in reply to questions, although he was able to do so. There were marks of burning on his lips, chin, and neck. With difficulty he was got to take some milk He was put to bed at once but was very restless. On the following day he took milk and beef tea, but remained very reticent and restless, so much so that it was difficult to keep the bed-clothes on him On the third day he changed suddenly for the worse and died at 8.50 A.M on the following morning A post-mortem examination was made when the brain was found to be the seat of organic disease.

The next witness was one William Allen, a colliery labourer who "had been an army hospital orderly" He said that he had known deceased for seven years, had worked in the same pit with him, and "had attended him since Christmas," the attendance, as he explained, comprising visits five or six times a day and the administration, "as he had done to hundreds of others, of medicines and lotions. A policeman proved finding among the medicines prepared by Allen for the use of the deceased a bottle labeled 'Nitric Acid, Poison" with the contents of which Pearce had apparently committed suicide. This witness gave evidence that Allen's attendance upon the deceased was assiduous and that when Pearce was suffering apparently from mineral poisoning he administered "milk and mustard to wash the poison out of him." Mr W H Clark and Mr James Wild both gave evidence that on being summoned to see Pearce he was obviously suffering from corrosive poisoning and was also in a condition of extreme mental despondency, so that for his own sake and that of others it was necessary to send him to the Abergavenny Asylum

The coroner in summing up referred, according to the *Abergavenny Chronicle and Monmouthshire Advertiser* to the witness, William Allen, as "a mass of gross ignorance, presumption and self-conceit and expressed his regret that he could not clearly see his way to direct the jury to charge him with manslaughter The jury delivered the following verdict 'The deceased committed suicide by taking poison—viz. nitric acid—whilst temporarily of unsound mind and the jury fully concur in the strongest censure of the conduct throughout the matter of the witness William Allen."

We have narrated this typical but not very unusual case of quackery at some length—firstly because the miserable death of the victim gives it a lurid importance, and secondly because from all accounts the prevalence of the audacious charlatan in mines and coeling pits is becoming little short of a public scandal It is hard to think that no proceedings can be taken against the man Allen who openly alleges that he has only done in the case of Pearce what he has done in hundreds of other instances. The coroner was of course, quite correct in his view that no charge of manslaughter could be brought against him on this occasion, but his opportunities for enacting similar tragedies in the future should be made more limited. Is it not possible that the overseers and foremen should keep an eye upon the workmen who are more or less committed to their care and should make some attempt to enlighten them upon the suicidal folly of trusting to the voice of the bone-setter and the miraculous curer"? The miners hours are watched over by more or less interested politicians and his wages are subject matter for the energies of the philanthropist and the agitator there is quite room for an occasional propagandist to preach to him the doctrines of good sense in respect of his health

We make the suggestion but without much hope of its bearing fruit, for in our experience the foreman is as likely to be the votary of the quack as any of the men under his charge And in this connexion the following letter which we have received for publication from a correspondent makes interesting reading:—

J BLACKBOURN
Bonesetter to the Grimsby Fishermen's
Association, Fishermen's and Sailors
Union, General Workers Union
also to the Railway Company
X Rays used if desired.

MOSS BANK CLEETHORPE ROAD GRIMSBY
MR. —— March 20th 1899

DEAR SIR —In my opinion I dont think your Arm will ever be right again. as regards the varicose veins of the arm the rupture of Flesh and guiders in time will be right in my opinion you will have to wear a Armlett always. Yours truly

J BLACKBOURN

The medical practitioner who sent us the above letter writes in explanation of it: The patient had a bit of timber fall across his arm which has done him no injury whatsoever When he came to me he had his forearm bandaged and two straps of adhesive plaster round the arm When I removed them the incurable varicose veins immediately disappeared. I told him that a Armlett was not necessary The information in the top left-hand corner I believe to be correct and I should think it places the medical gentlemen who are connected with these societies in a very dangerous position likely at any time to bring them within the purview of the General Medical Council. I could excuse the ignorant fishermen's associations, but what is to be thought of the railway company giving a *locus standi* to quackery in this manner?" What indeed? Well, only that the health of their employes is apparently a matter of no moment to the company or they would prevent Mr J Blackbourn from announcing himself as their bonesetter even if they did not go so far as to point out to the men that the ministrations of audacious quackery always mean disaster

A QUESTION OF PENSION

A WORKHOUSE medical officer holding two appointments as such resigned one three months after the other Can he claim superannuation allowances only from the date of resignation of the last of the two appointments or can he claim the extra three months on the one appointment?

*** The information given by our correspondent is not sufficient to form a definite opinion upon. If the workhouses referred to are situated in one and the same union the superannuation allowance will date from the day of resignation of the second or last appointment and is calculated upon the average emoluments of the past five years. On the other hand, if the workhouses are in different unions separate superannuation allowances will be granted dating from the day of resignation in each case. As a general rule, if a workhouse medical officer holding two appointments under the Poor law vacates one three months after the other the difference is so small as to be hardly worth consideration but the amount of superannuation generally dates from the later resignation.—ED L.

"THE USE OF MIDWIFERY FORCEPS"

To the Editors of THE LANCET

SIRS,—It is a pity to see one practitioner come forward and openly accuse others of 'clapping on forceps' and for the sake of the expenditure of an extra hour sacrificing the perineum. This gentleman asks if so doing is justifiable" or if the doer 'has the future good and safety of his patient at heart." I deny altogether that there is any man in the profession who does such a thing It is to every practitioner's own interests that the perineum should be saved from rupture. To talk of medical men losing sight of the welfare of their patients for the sake of saving time is a gross insult. I cannot imagine a medical man applying forceps and at the same time admitting to his inward conscience that there is a chance of injury arising from his interference which outbalances the advantage Men who will do such things are of the black sheep which are found in every flock but are to be reckoned as outside. If any discussion on the use of the forceps is required it is to my mind not how long can we safely delay but how to come to an early decision In protracted labour a time will come when those about the patient can see the necessity for interference as well as the medical attendant. It only too frequently happens that the medical man allows that time to arrive because until then he is sure to be met with opposition on the part of the relatives If not of the patient as well There can be no better axiom than that by Pinard—'When we are convinced that natural efforts are failing and are unlikely to effect delivery except at the cost of a long delay, it is better to interfere soon rather than late." In my own practice I use the forceps on an average at every sixth labour I attend To their early use I attribute the fact that out of some hundreds of cases I have not lost one. Moreover I have seen no ill effects from their use not from any particular skill in their use but simply from the fact that I have used them as soon as the necessity became apparent and not waited till it became evident. When so much that is unnatural and artificial enters into the daily life Nature should not be left to her own resources to the last minute. How can she thereafter be expected when in an exhausted condition to undertake the process of repair?

I am, Sirs yours faithfully
A. T STANSON.

Hirst, Morpeth, March 27th, 1899.

"A RIGHTEOUS MAN REGARDETH THE LIFE OF HIS BEAST"

he Editors of THE LANCET

SIRS,—It may interest your readers to know that the therapeutic effects of Christian Science can be used for the benefit of the lower animals as well as man In a recent conversation with a prominent light of that community she related a case in which a valuable racehorse went sick and after five veterinary surgeons had failed a lady Christian Scientist was called in with the usual happy results. I naturally asked what was the sin which the horse had committed (for "disease is the result of sin") and I was told that it was its master's sin that made it ill. The lady had brought Christian Science to bear on the master and the horse got well and won him 6000 dollars. This vicarious suffering seems to throw fresh light on the text A righteous man regardeth the life of his beast." I am, Sirs, yours faithfully

WM BRUNTON.

Harley street, W March 27th, 1899.

A POINT IN MEDICAL ETHICS

To the Editors of THE LANCET

SIRS,—May I ask your opinion in the following case? A has been the local medical attendant of the family of X for over seven years during which time X has also consulted B. Recently the wife of X without the knowledge of A, consulted B who advised an immediate operation. On the day preceding the operation X called upon A to know if B had called or written respecting it, as he had left all the necessary arrangements in the hands of B. To the surprise and

annoyance of X A had received neither verbal nor written communication and his only reply was that he would be in readiness to do what ever was required of him, but that he could do nothing till he had heard from B. The following day B brought assistants with him and operated without holding any communication with A? Now has B done rightly by A? In order to better understand the situation X lives next door to A and B lives in the adjacent town six miles off B is the president of the medical society and on the consulting staff of the hospital of that town and is a Doctor of the University of London, and his assistants at this operation were the one a neighbour to B and the other a neighbour to A. At a time when medical morals and good manners are claiming greater prominence in our professional life and when men look to high places for guidance it would be instructive to learn whether in your editorial judgment B set an honourable and justifiable example in ignoring A who has consulted with and assisted him in the same household before and if X acted wisely in not thrusting himself forward uninvited, without knowing time and circumstance?

I am Sirs yours faithfully

April 4th 1899 D P H

*** There can be but one opinion upon the situation as set forth by our correspondent A acted perfectly rightly and B perfectly wrongly —ED L.

A MEDICAL SPECIALIST

To the Editors of THE LANCET

SIRS—A certain individual of the name of Mackenzie has temporarily established himself here and exhibits a plate in a shop window where he lodges, describing himself as "Medical Specialist." He is obtaining according to information I receive fees even up to two guineas. Is he within his legal rights in exhibiting a plate with the description "Medical Specialist" on it?—I am Sirs yours faithfully

March 31st, 1899 ENQUIRER.

*** It is not possible to be certain whether a particular bench of magistrates would consider the Medical Act to be transgressed by such a plate. To our thinking the person is clearly pretending to be a medical man and should be fined —ED L.

THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H KINGSLEY HUNTER, L.S.A.

To the Editors of THE LANCET

SIRS—Dr A. G Bateman Secretary of the Medical Defence Union has joined the Hunter Fund Committee. I shall be much obliged if you will acknowledge in your columns the following subscriptions —

	£	s	d.		£	s	d.
Dr W Dome t Stone ...	1	1	0	Mr Richard Holton ..	1	0	0
Mr E. Gibbs Smith ..	0	10	6	Mr Dryden Stead ...	0	10	6
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Dr D M. King	1	1	0	Mr Arthur G P Lory ..	0	10	0
Dr R. A. Fryer	0	10	6	Mr Charles Turner Standring ...	0	5	0

I am Sirs yours faithfully

RIVERS WILLSON Treasurer

42, Wellington-square Oxford, April 5th, 1899

THE EMPLOYMENT OF UNQUALIFIED ASSISTANTS

To the Editors of THE LANCET

SIRS—A medical practitioner in the town in which I live has a son college (a second year s man) (1) Is this student allowed to visit scribe and attend midwifery cases? He also visits and prescribes the parish patients his father being the medical officer for the district. (2) If this is allowed by the General Medical Council would I not be allowed to employ an unqualified assistant? (3) If give information to the Council must I attend to prosecute or prove case? What steps should I take if any in the matter?

I am, Sirs, yours faithfully

April 3rd 1899 X. Y Z.

The wording of the decision of the General Medical Council upon the employment of unqualified assistants is not absolutely clear We recommend our correspondent to consult THE LANCET of Nov 27th, 1897 and to read the report of the proceedings of the General Medical Council and the first leading article. 1. The son can only act as a *bonâ fide* pupil 2. X. Y Z. must not wrongfully employ an unqualified assistant because he believes that another practitioner is so doing. 3 The Medical Defence Union, 4 Trafalgar-square, or the London and Counties Medical Protection Association might be informed of the matter and might be willing to introduce it to the notice of the General Medical Council.—ED L.

FRAUDS ON THE POOR

An inquest was held on March 29th by Mr Braxton Hicks who said that he wished to take that opportunity of exposing a gross fraud upon the poor Recently he had held an inquest upon the body of a girl who was burnt to death. The father stated that she suffered from epilepsy and he had been attracted by an advertisement headed "I cure fits." He therefore purchased a bottle of medicine called Elepizone" prepared by H. G Root, 23, Endsleigh-gardens Euston road N W The price of the bottle was 7s Mr Womack of St. Bartholomew's Hospital had analysed the contents of the bottle and had found it to contain three grains of potassium bromide to the drachm, together with a little colouring matter The value of the contents was about 2d. We suppose from this that it was a 16 oz. bottle which would contain at three grains to the drachm 384 grains of bromide Pure potassium bromide costs 5s per lb. therefore 384 grains would cost 2d. The coroner stigmatised this as nothing less than a fraud upon the poor and we quite agree with him We commend this case to the notice of Mr Walter Long All such articles should be labeled in large letters with the nature of the contents and the quantity thereof Then if people like to pay 7s for what is worth at the outside 6d. including the bottle cork and wrapping they may do so But, to quote Mr Long, the public should always know what they are buying

"MORE DANGEROUS THAN INFLUENZA"

We quote the following admirable remarks from the *Newcastle Journal* of March 30th where they appeared above the signature Whist"—

> There is a disorder about that is linked to influenza, but incomparably more dangerous than influenza, and the doctors are as helpless against it as I am It is a disease of the mind, with as many physical listempers in its train as would fill Pandora s box It is the vulgar, stupid and inexplicable credulity which induces a man believing he has caught influenza to take the advice of anybody about a cure There are as many nostrums and catholicons about for influenza as would poison all the beasts of the Sunderbunds making even the muggers of the deeps there vomit. In railway trains and tramcars in the street and in the market in the drawing room and in the public-house you may meet them every day who have their remedy at hand—a remedy that cured some acquaintance of theirs straightaway for a certainty It may be anything from treacle and sulphur upwards. No matter it is sworn to as a cure Believe me these amateur quacks are more dangerous people than the professional quack because they get at you in the name of friendship and in their ignorance sincerely believe what they tell Believe me further that they cannot tell what ails you nor what will cure you and that the treatment good for one patient might be bad for another. There is but one course for a sensible person to follow when ailing—that is to go straight to a qualified medical man and follow his directions to the letter

MEDICAL PRACTICE IN MASHONALAND

To the Editors of THE LANCET

SIRS—Can any of your readers give me information as to the prospects of a medical man settling in Mashonaland?

I am, Sirs yours faithfully

April 5th 1899 ANTICALL

A—We subscribe to the general and well accepted rule that the intimate relation is not, to quote our correspondent s words the most suitable medical attendant in any case at all productive of anxiety" But the particular case put to us has its peculiarities We think the patient and her parents should give their opinion and that the medical men should promise to waive their personal feelings and abide by it

Visitor—There is no scale for the guidance of our correspondent, and in the absence of all particulars of the nature and gravity of the case we do not feel able to give him more than general advice He should take into consideration the importance of the case and the value of his time and of his evidence on behalf of his patient

Important.—The coroner passed no strictures whatever on the hospital Our correspondent would seem to have been much beholden to hospitals himself why therefore bite the hand that has fed him?

J F T—The address of the firm in question is X L.P Window Co Ltd. 159 Victoria-street, S W The dangers of window cleaning have often been referred to in our columns.

Workhouse M O—The authority for the statements in our annotation was the Lunacy Acts The matter was dealt with in THE LANCET of Feb. 11th, 1899

U C D—The point has been mooted in our columns and elsewhere. It should soon receive an answer based upon statistical experience

Mr A C Poper—We have already favourably noticed the saddle in question in our issue of Oct 2nd, 1897

During the week marked copies of the following newspapers have been received *Slough Observer Portsmouth Times London Morning Bath Herald Stockport Chronicle, Cromer and North Walsham Post, Birmingham Daily Post Manchester Courier Scotsman Times of India, Pioneer Mail, Sheffield Daily Telegraph Sun, Manchester Guardian Hampshire Post, Citizen Architect, Builder South Wales Daily News Ayrshire Post, Surrey Comet Middlesex Chronicle, Isle of Wight Express Yorkshire Post Chatham Observer East Essex and Halstead Times Launceston Post, Surrey Advertiser, Market Rasen Mail, Faversham News Ilfracombe Gazette Liverpool Daily Post, West Kent Advertiser Lichfield Mercury Midland Herald, Freeman s Exmouth Journal Bristol Mercury, Seaford Gazette, Isle of Man Times Leeds Mercury Rugby Times Skipton Herald, Brighton Argus Sanitary Record Christian World Mining Journal, Local Government Journal, Brighton Gazette, Windsor Chronicle, Australasian Medical Gazette Local Government Chronicle Nottingham Daily Express City Press Reading Mercury Carlisle Recorder (Philadelphia) Public Health Engineer The Star (Johannesburg) Ayrshire Post Daily Chronicle Eccleston Woodhouse, and Staveley Express &c. &c.*

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K.—Dr C F Knight, Edinburgh Knighton Union, Clerk of

L.—Mr L. Littke, Fünfkirchen Messrs. Langton, Fort, and Co., Lond. [illegible] Abergavenny Asylum [illegible] ingale, L[illegible] the deceased was and Martin[illegible], Newbridge, who E S Lee [illegible] Lewis, Lond. [illegible] effect that the and Smiths, Lond[illegible] feeble and

M.—Dr C E. Maguire[illegible] to speak Dr J M H. Martin, [illegible] were Manchester Clerical, [illegible] he was and Scholastic Association[illegible] tary of Medical Department [illegible] Admiralty Director General [illegible] Dr P W MacDonald Dorchester Dr A. E. Maylard Glasgow Dr C G MacVicker Street Dr F D Madden, Cairo Mr N M. MacWharrie, Lond. Messrs C Mitchell and Co., Lond; Medicus, Lond. Mr A McLean, Dilwyn; Manchester Royal Infirmary, Secretary of Dr Mullins, Watton.

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T.—Dr J C Thresh, Chelmsford; Mr R. Turner Bootle Dr Paget Thurston, Perth Western Australia.

U.—University College, Dundee, Secretary of

societies in a very dangerous position, likely at any time to bring them within the purview of the General Medical Council. I could excuse the ignorant fishermen associations, but what is to be thought of the railway company giving a *locus standi* to quackery in this manner?" What indeed? Well only that the health of these employés is apparently a matter of no moment to the company or they would prevent Mr J Blackbourn from announcing himself as their bonesetter even if they did not go so far as to point out to the men that the ministrations of audacious quackery always mean disaster

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The information given by our correspondent is not sufficient to [illegible] a definite opinion upon If the workhouses referred to are [illegible] in one and the same union the superannuation allowance [illegible] field, [illegible] from the day of resignation of the second or last appointment [illegible] is calculated upon the average emoluments of the past five [illegible] the other hand if the workhouses are in different unions [illegible] D Balfour [illegible] annuation allowances will be granted dating from the [illegible] Messrs Butler [illegible] on in each case As a general rule, if a workhouse [illegible] in Furness [illegible] Blackburn [illegible] ding two appointments under the Poor-law [illegible] Northampton [illegible] after the other the difference is so small as to be [illegible] and Gross, Lond. [illegible] deration but the amount of superannuation [illegible] the later resignation.—ED. L.

C.—Mr J J Culm[illegible] Bahamas Dr J B[illegible] Dublin Mr H W [illegible] Lond. C E. G B [illegible] H and W Cox, Leic[illegible] Messrs Cooper and Co., [illegible] Messrs. A. Cohen and Co. [illegible]

D.—Mr J H. Divan Carrick-[illegible] Suir Messrs. Downie, Alton [illegible] and Alton, Glasgow Dispenser, [illegible] Darwen.

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I.—Mr R. Ingram Johnson Chester-le-Street.

J.—J P B. J L J J M. J H.; J L. P J G C J S

K.—Messrs Keith and Co., Edinburgh.

[illegible] *Editors of* THE LANCET

[illegible] the practitioner come forward and expose [illegible] Forceps and for the sake of the expectant [illegible] the perineum. This gentleman asks [illegible] doer has the future good and [illegible] deny altogether that there is [illegible] such a thing. It is to every [illegible] perineum should be saved from [illegible] losing sight of the welfare [illegible] Call [illegible] time is a gross insult. [illegible] Dr J [illegible] Forceps and at the same time [illegible] Mr [illegible] there is a chance of injury [illegible] Scarborough [illegible] Secretaries the advantage [illegible] Eskbank which are found in every [illegible] Messrs. S[illegible] discussion on the [illegible] St John [illegible] how long can we safely [illegible] S Strange [illegible] protracted labour [illegible]

T.—Dr M[illegible] the necessity for interfering [illegible] Japan; T[illegible] so frequently happens [illegible] Turner F[illegible] cause until then [illegible] Mr J Thir[illegible] relatives, if not of the [illegible]

V.—Miss Vinc[illegible] that by Platin[illegible] Van Damme [illegible] falling and [illegible] Voigt, Bartonc[illegible] delay It is let [illegible]

W.—Dr T A. W[illegible] I use the forceps [illegible] R. L. Woollcot[illegible] their early use [illegible] J C Walker [illegible] I have not [illegible] W and F Wa[illegible] not from [illegible] Mr J Ward [illegible] Watkins and Co[illegible] I have a [illegible] West End Patholo[illegible] waited till [illegible] tory, Lond, Secret[illegible] ficial [illegible] W E T; W M [illegible] urces to [illegible] W H P Mr [illegible] Manchester

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annoyance of A, A had received neither verbal nor written communica ion and his only reply was that he would be in readiness to do what ver was required of him, but that he could do nothing till he had eard from B. The following day B brought assistants with him and perated without holding any communication with A? Now has B done ightly by A? In order to better understand the situation A lives next loor to A and B lives in the adjacent town six miles off B is the presi lent of the medical society and on the consulting staff of the hospital f that town and is a Doctor of the University of London, and his assist nts at this operation were the one a neighbour to B and the other a neighbour to A. At a time when medical morals and good manners are laiming greater prominence in our professional life and when m n ook to high places for guidance it would be instructive to learn whether n your editorial judgment B set an honourable and just example n ignoring A who has consulted with and assist 1 him in the same ton chol l before and if A acted wisely in not thrusting himself forward, uninvited, without knowing time and circumstance?

I am Sirs yours faithfully

April 4th 1899. D

* There can be but one opinion upon the situation as set for corre pondent A acted perfectly rightly and B perfectly wrong — Ed L.

A MEDICAL SPECIALIST

To the Editors of THE LANCET

SIRS,—A certain individual of the name of Mack... tablished himself here and exhibits a plate in ... lodges, describing himself as "Medical Specia... cording to information I receive fees even ... thin his legal rights in exhibiting a pl... Medical Specialist" on it —I am, Sirs your...

March 31st, 1899

* It is not possible to be certain w... magistrates would consider the Mr... such a plate. To our thinking the ... a medical man and should be fined ...

THE FUND FOR THE RELI...

MR. H KING

To the E...

SIRS —Dr A. G Bateman ... joined the Hunter ... will acknowledge ...

W Domett Stone
E. Gibbs Smith
Samuel ...
Griffith
D M. King
R. A. Fryer

42, Wellington-s...

THE EMP...

... great John ... lungs depended ... scrofula and that ... He remarked that ... animals were liable, pro ... was only the readiness ... when properly irritated ... eptibility, and that some ... Hunter stated that damp ... but not dry cold also saying ... those countries where little else ... He recommended if the ... that we should send the patients at once These pregnant remarks ... lectures are estimated at the present ... important truths

... LIABILITY OF FIGURES

... of phthisis is a prominent feature in the ... of this disease in England and Wales To ... ension the first necessity is accurate vital ... J Tatham in his evidence before the Royal ... on Tuberculosis exhibited tables showing the ... n phthisis in England and Wales at each age ... population from the decennium 1851-60 to the ... 1891-95, he further exhibited for the three ... -70 1871-80 and 1881-90 the phthisis rate in ... ion counties and for the last of these decennia ... orrected for age and sex distribution of their ... populations (The correction is made by apply... ge and sex distribution of the English death ... 11 age groups to the aggregate populations ... same age in the registration counties) The ... ty of the Registrar General s statistics is, I believe, ... perils therefore ... this as nothing less th... with him We can ... Long All such ... nature of the ... to pay ... for ... cork and ... public shoul... They deal with very large numbers, they ... of ever fuller inquiry and correction, and ... previous decades been analysed and criticised ... statisticians Dr Longstaff found that the ... incidence of phthisis was not due to the transfer ... deaths from phthisis into any other class Dr ... m states that he has no doubt whatever that there has ... n a steady and substantial reduction from first to last ... from the year 1851 to the year 1895 When such inves tigators do not find evidence of change of certificates of death perhaps it is needless to point out that a disease of very slow course, very common occurrence, and easy of diagnosis if fully developed is less likely to be wrongly certified than most causes of death

PAST AND PRESENT INCIDENCE

Chart 1 expresses the changes which have occurred in either sex at each age group from the years 1861-70 to the years 1891-95 illustrating the declension of phthisis It is very necessary in phthisis to mark the diversity of its incidence on age groups in detail The curves enable you to see the mortality per 10,000 in either sex at each age group, the height of curve showing the incidence of mor tality, the perpendiculars below simply measuring the amount of difference in the curves above at each age period comparing the years 1891-95 with 1861-70, the latter being 100, and the dotted horizontal lines showing when the fall reaches one quarter or one half of the rate of mortality exist ing in the 1861-70 decennium The greatest saving of life has occurred at those age groups when phthisis is most pre valent, but when we note the amount of fall at each age group this is seen to be most striking at the earlier ages and to be common to either sex, both having fallen to one half up to the age of 20 years, after 20 years of age and to the end of life there is gradually less and less lowering of the death rate and it differs for either sex In men it has reached the quarter line at the age of from 35 to 45 years, in women it is not until the age of 75 years and over that it only reaches the quarter line

COMPARISON WITH INCIDENCE OF OTHER FORMS OF TUBERCULOUS DISEASE

The form of the curves absolutely denotes a great difference in the age incidence of phthisis compared with that of other forms of tuberculous disease The curve for other tuberculous diseases begins with a maximum in the first five years of life, showing a roll of death eight times as heavy as that told off to phthisis The proportion continues to diminish until we approach old age, so that it is at once evident that it is not every kind of tuberculous infection which chiefly determines the onset of phthisis Phthisis is no doubt, as Koch insisted, due to local infection of the lung The difference in curve between

TABLE I —*Showing the Declension in the Death rate from Phthisis per 100 000 Living in England and Wales*

Males

Age in years	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and upwards
1861-70	99	43	61	219	38[illegible]	409	417	[illegible]06	330	202	66
1891-95	46	19	26	107	202	2[illegible]4	326	320	258	157	56
Fall of rate to 1891-95, the rate of 1861-70 being taken as 100 that of 1891-95 equals	47	44	41	47	51	61	77	83	78	76	85

Females

Age in years	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and upwards
1861-70	95	48	105	311	[illegible]97	4[illegible]3	390	285	207	124	45
1891-95	42	26	56	142	174	215	220	174	129	80	[illegible]5
Fall of rate to 1891-95 the rate of 1861-70 being taken as 100 that of 1891-95 equals	44	54	53	45	43	49	59	61	62	64	78

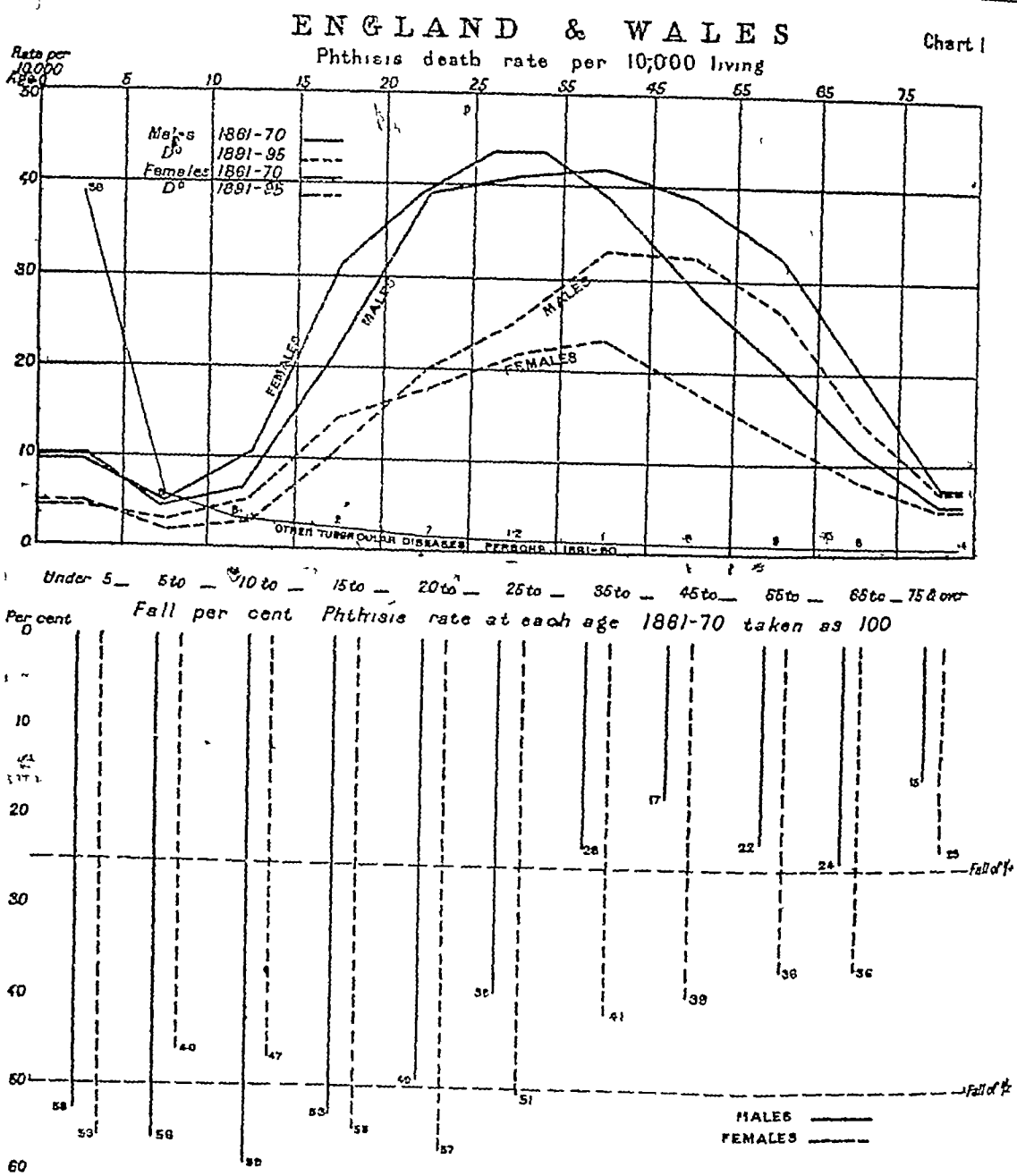
Proportion per Cent of Deaths from Phthisis compared with Deaths from all Causes

Males

	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and upwards
1861-70	1 35	5·2	13	35	45	41	31	20	10	3	0·4
1891-95	0·74	4·2	10	25	38	[illegible]	26	15	7	2	0·33
Fall in percentage of deaths due to phthisis from 1861-70 to 1891-95, 1861-70 being taken as 100	54	80	76	72	82	84	83	80	70	66	82

Females

	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and upwards
1861-70	1·4	6·2	23	47	50	45	32	18	7·5	2 1	0 3
1891-95	0·8	5 7	20	35	35	32	22	11	4 3	1 2	0·2
Fall in percentage of deaths due to phthisis from 1861-70 to 1891-95, 1861-70 being taken as 100	56	92	87	74	71	71	68	61	55	60	60



other tuberculous diseases and phthisis confirms clinical experience that the common infection of the lymphatic glands in early life does not commonly lead to infection of the lung

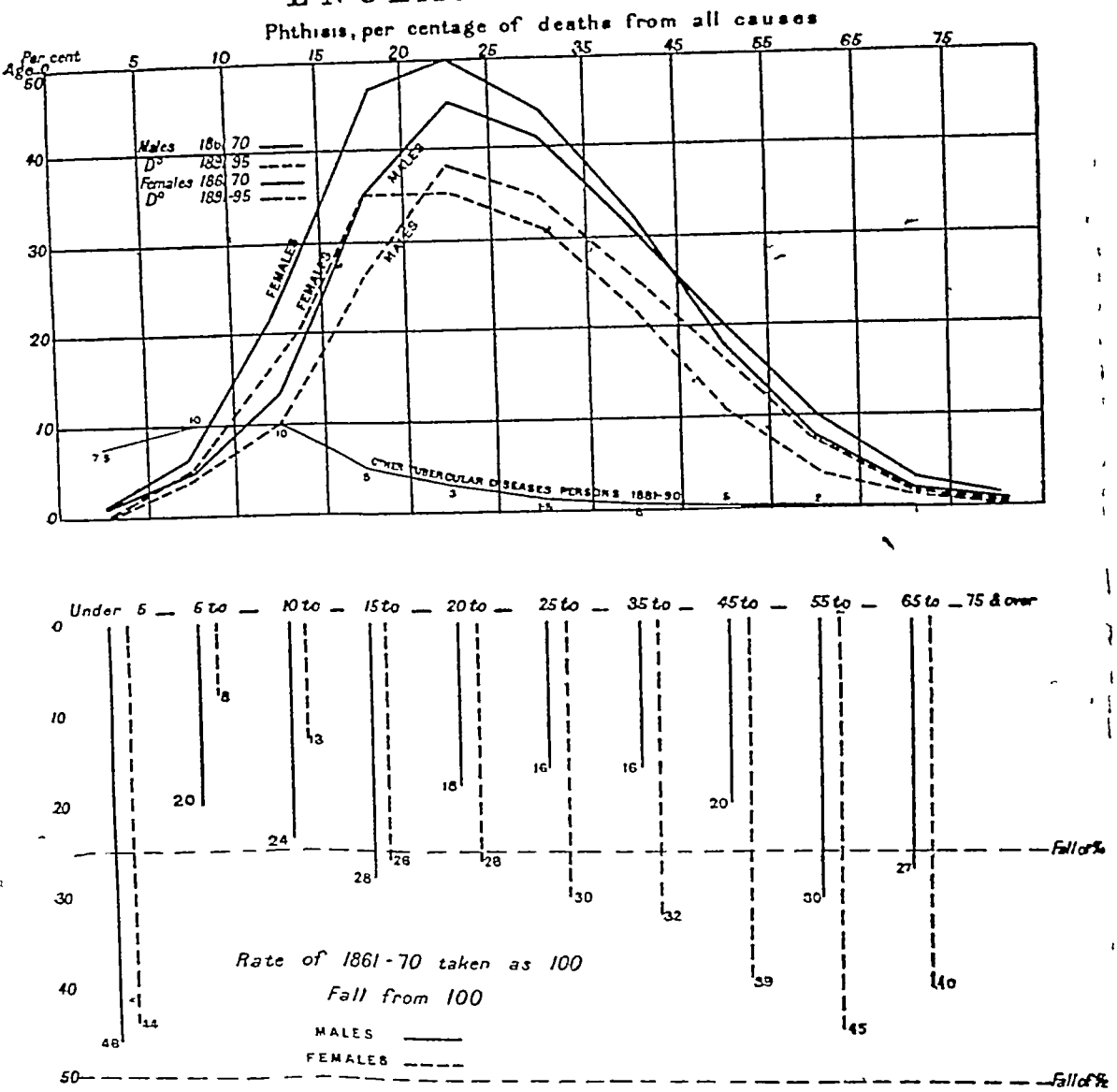
LUNG RESISTANCE ACCOUNTS FOR AGE AND SEX INCIDENCE

It is the power of the lung to resist infection which determines the curve of the phthisis rate at early ages The rate is comparatively insignificant when persons are more prone to nearly all the specific infective diseases and when the lungs are exposed to tuberculous infection as much as at any other age The growing lung is able to resist infection, resistance of the growing lung effectively accounts also for the very regular difference in the sex incidence of phthisis up to the age of 20 years, in either of these decennia which we compare we find up to the age of 20 years a regular excess in the girls and young women Constantly from 1860 to 1870 and since have the girls up to the age of 20 years exceeded the boys by 30 per cent Physiologically speaking boys and girls are not properly comparable at the same ages. Mr Charles Roberts says that "a woman's growth terminates two years earlier than a man's From boyhood to manhood extends over three or four years, but girls develop into women in three or four months" I maintain this to be particularly true of lung development, the earlier and more rapid development of the lung is most conspicuous in girls Growth in height is completed at the age of 15 years, while boys go on growing two or three years later (Table II), and

TABLE II —*Showing the Average Yearly Increase in Height in Centimetres* *

Age	Girls.	Boys.	Age.	Girls.	Boys.
From 5 to 6 years	5·2	5·5	From 12 to 13 years	5·8	5·3
, 6 „ 7 ,	5·5	5·1	, 13 , 14	4·6	6·6
7 „ 8	5·3	5·1	, 14 , 15 „	2·9	6·1
8 9 „	4·5	4·9	, 15 16 ,	1·2	6·9
, 9 „ 10	5·0	5·1	16 17 ,	0·8	2·9
„ 10 11 „	5·3	4·1	17 „ 18 ,	0·1	1·3
„ 11 „ 12 „	6·2	4·6	—	—	—

* Professor Hartwell, based upon investigations of Professor Bowditch in regard to height of 24 595 children of schools of Boston



when girls have attained full neight unlike boys they have almost completed their lung development Then it is the full grown lung of the girl aged 15 years, having lost much of its powers of resistance against tubercle, that allows the death rate from this cause at the age of 15 years in the girl to equal the rate at the age of 17 years in the boy, making the curve in women show the most rapid advance at the age from 15 to 20 years, while that for men cannot do so until the age of from 20 to 25 years

DEATH TO DEATHS RATIO

One may illustrate this propensity of the lung by another diagram showing the proportion of deaths from phthisis to deaths from all causes This is information quite different from mortality per 1000 living and of value for phthisis In the first place, it demonstrates that the declension of phthisis is greater than that of the general death rate the curves for 1890-95 being lower In the second place, it shows that the fall in this proportion between mortality from phthisis and mortality from all causes is a less fall than we saw in the diagram of mortality from phthisis, there is less difference between the curves Thirdly, it shows a fall more evenly affecting youth, adults, and old age [1] Returning to the question of immunity of the growing lung, Chart 2 shows that the proportion of deaths in the first five years of life is but one-fourth or one-fifth of that of the second five years The curves show also the difference of sex incidence up to the age of 20 years Girls here show even a maximum at the age of from 15 to 20 years and boys not till the age of from 20 to 25 years. Both facts confirm remarkably my contention that it is the physiological age of the lung which causes immunity in childhood and the sex incidence to the age of 20 years It is not the indoor life of girls which is responsible for the latter, else overcrowding would affect girls particularly at this age, but effects of overcrowding will be shown to be not visible till a later age, and also country life should mitigate the excess, whereas the difference is most marked in the most rural districts

As the decades of life pass by it is evident that the declension of phthisis is more marked in women than in men—being double Sex alone will not account for the difference after the age of 20 years

I propose to investigate the causes to which this sex difference and the declension of phthisis may be due Phthisis requires a specific germ and a susceptible lung The condition of the lung depends upon constitution and environment, as Dr T Glover Lyon briefly expresses it, there are three factors in phthisis—namely, infection, hereditary susceptibility, and acquired susceptibility

[1] Where figures in Chart 2 and Table I. do not coincide the table is to be taken as correct.

INFECTION

The declension of phthisis as expressed in these charts gives us no information as to infection and shows by age and sex incidence that it does not behave like other infective diseases The diagrams declare that infection of the lung seizes the individual at very different ages from those in which death from tuberculous infection elsewhere is most prominent, they suggest the questions, Why is it that women who are often nursing the men after the age of 65 years have only one half as much phthisis? and why has not a less declension been observed at those ages of school attendance when throat infections have been increasing? and they suggest the answer that infection is quite subsidiary to other influences which create susceptibility

HEREDITARY SUSCEPTIBILITY

Concerning hereditary susceptibility the diagrams only declare that the declension of phthisis is great in spite of it

ACQUIRED SUSCEPTIBILITY—DISEASE AND OCCUPATION

It is among the multitudinous factors of acquired susceptibility, especially at the earlier ages, that we naturally look to find the explanations for a fall in mortality, for they are the factors we know to fluctuate In so wide a field our regard must be limited to a few well known agencies—disease, occupation, food, air, and climate First, taking disease at the age of from five to 25 years, one points to the difference of fall in the mortality diagram compared with the liability diagram At the age of from five to 25 years phthisis mortality has fallen most—namely, one half, *it has hardly fallen a quarter in the proportion of* deaths from phthisis to all deaths during that period of life, one infers that the fewer deaths from all causes in the years 1890–95 were accompanied by still fewer lungs which were susceptible to phthisis The class of zymotic disease fell more than phthisis, resulting in the saving of three or four times as many lives, one may infer, according to Dr Farr, that if so many deaths from zymotic disease have been prevented, twice as much continued illness ending in recovery has also been prevented, consequently I would point out that the difference in fall at the age of from five to 25 years in these two diagrams is probably to be accounted for to a large extent by the absence of the damaged lungs among weak convalescents, such being met with now but half as often as they were met with in the decade 1861–70 From 25 to 65 years of age we have seen that the declension of phthisis in men is about half that in women, as age increases after 65 years there is a lesser fall in mortality One might expect to see the proportion of deaths from phthisis at this age correspondingly larger but the liability of both sexes to die from this cause is, notwithstanding less than formerly The fall in phthisis mortality is less probably because of the existence of causes which induce a greater liability to all kinds of death at those age periods which we note have a higher all cause death rate than was formerly the case

The difference in sex incidence at these ages is due to a susceptibility *of the lung to acquire disease in the man* —it is not peculiar to phthisis Dr Longstaff showed that in this country in the decade 1871–80 males died more than females from pneumonia, especially between the ages of 35 and 65 years, when the proportion was two to one The reason why the men have not improved as have the women may be due to occupational agencies with the increasing proportion of male adults who undertake indoor employment conducive to lung disease, while women are more out of doors and with much less sedentary work than used to be the case, owing especially to the invention of the sewing machine The diagram tells us that it is not the environment of occupation alone acting on the lung which accounts for the difference between men and women, for this difference is more noticeable after the age of 65 years

It may be remarked that, besides men being particularly exposed to sources of lung damage during their age of occupation which may conduce to disease in later life, after 65 years of age they suffer twice as much as women from Bright's disease as well as from phthisis But food agency may be more worthy your attention here, for when old and out of work men are worse off than women in most parts of the country All through life the declension of phthisis has been promoted by improved nutrition of the lung which may have been as influential in mitigating the disease as the agencies of better health and more sanitary occupational surroundings.

FOOD-SUPPLY

The British public eat more and more Agricultural returns declare that in the last 20 years the yearly ration per head of the public has increased 10 per cent in both bread and meat The poorer classes have no doubt obtained a still greater benefit, the wealthier previously enjoying all the meat and bread they required This country took the lead in perhaps the first great step to the successful treatment of phthisis by introducing a special agent of nutrition, cod liver oil Nowadays patients under Dr Wahlters' care at Nordrach rightly hold that their extra feeding is a great means of cure, nutrition is equally a means of prevention

England, I believe, is in the van of all countries in respect to its fall in the phthisis rate and no small share of this is due to its prosperity supplying more food and better food for all labourers and their families In Table III, showing the

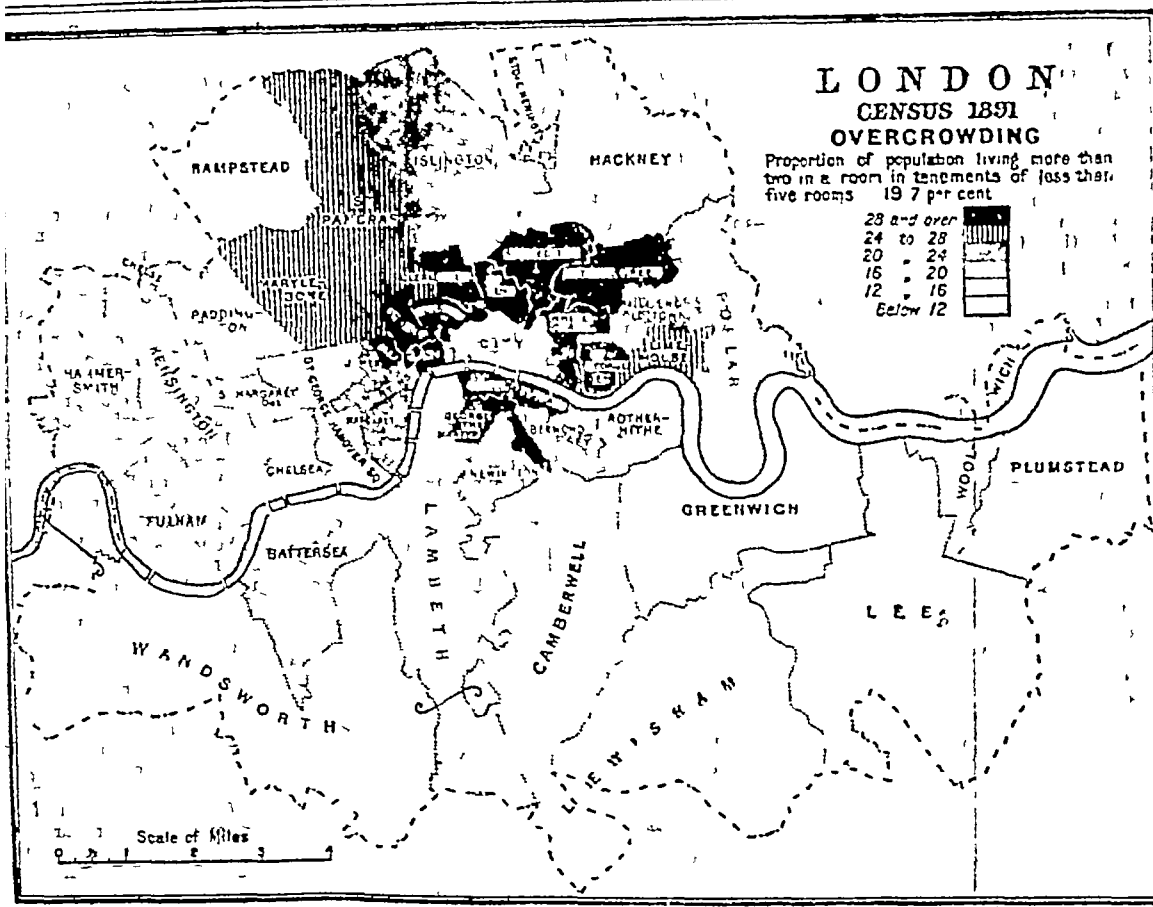
TABLE III.—*Showing the Phthisis Death rate per 100,000 Living in England, the Price of Corn, the Amount of Poor law Relief, and the Average Wage*

Date	Persons (all ages)	0 to 20	20 to 65	65 and over	Price of half-quarter of wheat	Poor-law relief per 800 living	Average wage (Bowley) †
1861–65	252	M 101 F 131 * 130	394 366 93	164 100 67	24s	22	100 (1860)
1866–70	244				27s	21	113 (1866)
1871–75	221	—	—	—	27s	17	113 (1870)
1876–80	203	M 76 F 100 * 132	352 289 82	156 88 56	— 24s	14	132 (1877)
1881–85	183	M 57 F 79 * 138	309 241 78	141 70 49	20s	13	124 (1883)
1886–90	163				16s	12	125 (1886)
1891–95	146	M 48 F 64 * 133	261 194 74	129 67 52	14s	11	140 (1891)

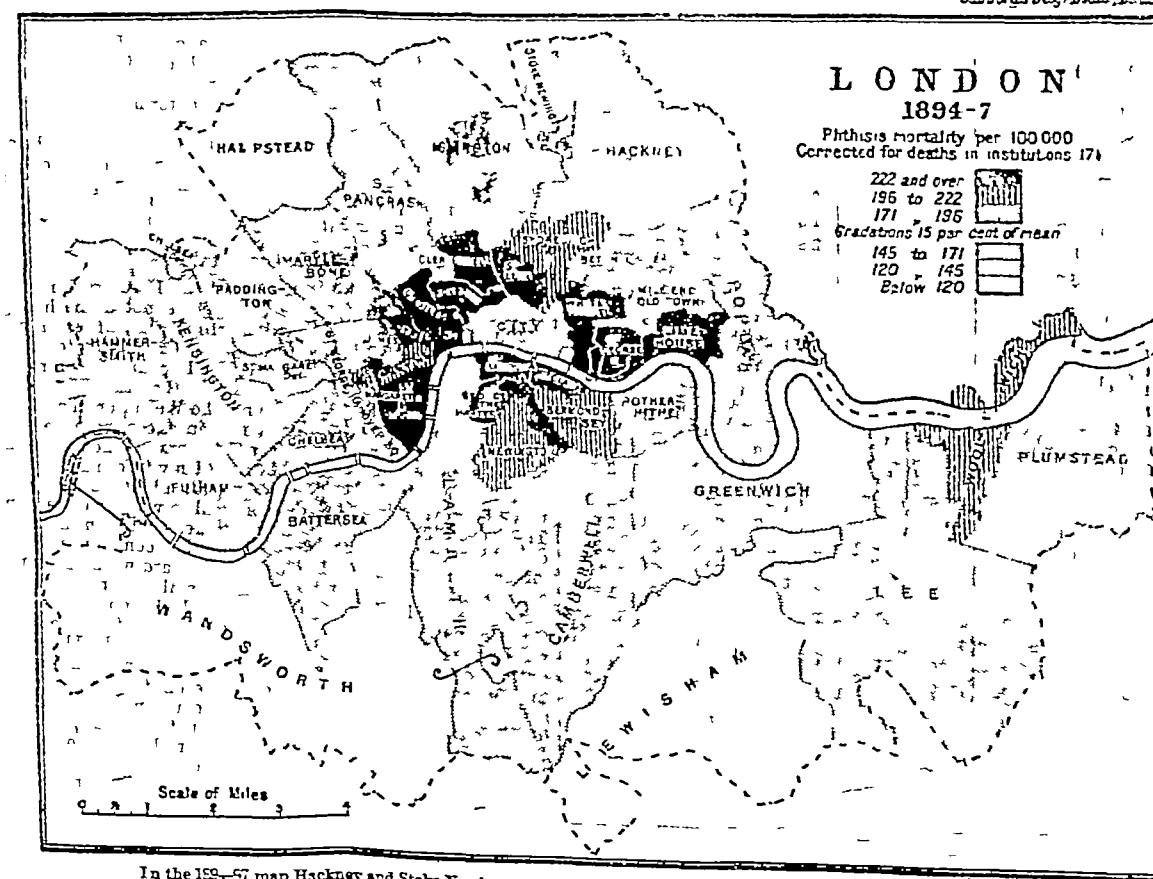
* Figure representing the female death rate the male death-rate being taken as 100. † 1860 wage taken as 100.

phthisis death rate, are placed three columns giving particulars regarding corn prices, pauperism, and wage-earning, three commanding factors in the prosperity of the public It is interesting to see a coincidence and a remarkable agreement between the fall in the phthisis rate, the fall in the price of corn, the fall in the number of paupers, and the rise in the average wage (I may say that Mr Bowley, by taking the ratio of the rise of wages from time to time in the largest groups of wage earners, such as iron workers and agricultural labourers, estimated the increase of wage, and when he also took into account the fall of prices he estimated that on an average from 1860 to 1895 the wage-earner's real income had doubled)

The increment of nutrition might be expected to influence the ages of youth and adolescence more than later ages, the greater fall in the phthisis rate during the first 25 years of life may be evidence of this Local evidence to the same effect will be referred to later If a more liberal diet is responsible for much of the declension the wealthier classes should have contributed a smaller share, the very few records which can be tested seem to be confirmatory Five septennial reports of the Scottish Widows' Fund (1000 deaths from phthisis) show the same percentage of deaths on the number of lives at risk since 1860 until the last report where advance is visible Since 1871 the legal and medical professions show little diminution in the death rate between the ages of 25 and 45 years Dr Ogle's valuable paper on Mortality in the Medical Profession 1873 to 1882 shows that the proportion which deaths from phthisis bore to deaths from all causes was at each age the same nearly as in 1890–92. It is difficult to compare the age distribution of the profession at these periods As far as I can trace, the well-to-do classes have always suffered much less from phthisis and have not gained a proportionate declension Neither the Registry Office at Somerset House nor that at Dublin can provide data to further test the truth



Stanford's Geog. Estab., London



In the 189—97 map Hackney and Stoke Newington

VENTILATION

The health of the lung depends upon the air it inspires as well as upon its nutrition "Air sewage," as Dr Ransome terms it, is a potent factor in acquired susceptibility, though not one the prevalence of which among the public can be readily measured and set down in black and white From 1871 to 1891 no material change took place in the allowance of house room per head of the population, great advances have been made in the ventilation of factories, especially of textile industries, owing to legislation in the past I consider that there has been some improvement among the poorer people in habits of ventilation, but it is by no means general and on all sides one hears how deep the public ignorance is or their negligence in this respect.

TABLE IV —*Showing the Phthisis Death rate per 1000 in London in the Years 1894–97, Corrected for Deaths in Institutions*

—	Population. Census 1896.	Percentage of population overcrowded Census, 1891	1894	1895.	1896	1897	1894–97
WEST:—							
Paddington.	124 506	16·81	1 3	1 32	1·27	1 13	1·25
Kensington	170,465	17·26	1·5	1·49	1·42	1·44	1·46
Hammersmith	104 199	13 44	1·5	1 56	1·40	1 38	1·48
Fulham	113,781	14·49	1 4	1·40	1·66	1·54	1·50
Chelsea	96,646	18·53	1·6	1·92	1·82	1·61	1·78
St. George, Hanover-square	79 967	11 11	1 3	1 32	1·28	1 16	1·26
Westminster	53,234	20·85	2·5	2 32	2·24	2·70	2·44
St. James	23,050	23·78	2·0	1 50	1 89	2·27	1·91
NORTH —							
Marylebone	141 188	26·78	2·0	2 12	1·95	1·75	1·95
Hampstead	75,449	10 32	0·9	1·01	1 12	0·74	0·94
St. Pancras	240 764	27·62	1·9	1 79	1·93	2·01	1·90
Islington	336 764	20 25	1 5	1·60	1·45	1 44	1·49
Stoke Newington	33,485	10·83	1·2	1 12	0·82	1 17	1·07
Hackney ..	213,044	10·83	1·4	1 49	1·41	1·43	1·43
CENTRAL —							
St. Giles	38,237	29·80	3 1	3 31	2·91	2·99	3·07
St. Martin-in-the-Fields	13,077	19·82	2 5	1·81	1·97	2·60	2·22
Strand ..	23,782	30·85	3·2	3 16	2·89	3 36	3 15
Holborn	31,208	38·08	2·4	3 13	3·24	2·76	2·88
Clerkenwell	66,202	33·78	2 3	2·41	2 16	2·35	2 30
St. Luke	41,527	44·24	2·8	2 72	2·92	3 11	2·88
London City of	30,970	19 18	2·0	1 56	1·60	1·89	1·76
EAST —							
Shoreditch	122,348	33·68	2·2	2 31	1·87	2·03	2 10
Bethnal Green	129,162	34·23	1 8	1·90	1 80	1·88	1·87
Whitechapel	77 717	43·50	2·6	2·81	2·40	2·52	2·58
St. George-in the East	47,506	39·83	2 3	2·40	2·56	2·78	2·50
Limehouse	58,305	25·76	2·4	2 34	2·24	2·55	2 38
Mile End Old Town	111,060	22·00	1·8	1·65	1 38	1·40	1·55
Poplar	169,267	17 83	1·7	1·62	1·75	1·88	1·73
SOUTH:—							
St. Saviour, Southwark	25,365	32 37	2·9	3·28	3 11	3·22	3 12
St. George South wark	60,278	33·58	2·8	3 10	2·69	2·52	2·77
Newington	120,939	22·26	2 0	2 20	1·99	2·21	2 10
St. Olave	11,731	29 10	2·5	2 70	2 19	2·88	2·56
Bermondsey	85 475	23 30	2·2	2·23	2·03	2·04	2 12
Rotherhithe	40 379	18·00	1·6	1·90	2 19	1·58	1·81
Lambeth	295,033	15·87	1·6	1 76	1·63	1·67	1·66
Battersea	165,115	14·20	1 4	1·52	1·44	1·49	1·46
Wandsworth	187 264	5·57	1 1	1 17	0·97	1 14	1·09
Camberwell	253,076	11 10	1·4	1·58	1·54	1·50	1·50
Greenwich	175 774	11 17	1·4	1·54	1 57	1·48	1·49
Lewisham	104 521	3·59	1 1	0·87	1·01	0·90	0·97
Woolwich	41 314	14·45	1 9	2 24	2·09	1·91	2·03
Lee	38,588	6 43	1 1	1 47	1·27	1 19	1·25
Plumstead	59 252	6 43	1 1	1 55	1 35	1·56	1 39
London ..	—	19 70	1·7	1·77	1·68	1·71	1·71

LONDON PHTHISIS AND OVERCROWDING

The best instance of the influence of ventilation which I can provide is that given in the report of the medical officer of health of the London County Council The mortality figures taken for the districts of London for the past four years have been corrected by the Registrar General allocating the deaths in public institutions to their proper areas, as this is the first time that such reliable evidence has been obtainable The map of overcrowding is taken from the last census figures which tell what proportion of the population live more than two in a room, in tenements of one, two, three, or four rooms Mr Shirley Murphy, in his report to the London County Council, has shown the remarkable coincidence of increase of phthisis with overcrowding and has further provided me with figures which enable you to see that this overcrowding produces its effects in a small degree only upon growing lungs. Its effects are marked at an age when phthisis is usually at a maximum but still more are they marked as age advances (Table V) It continues to exhibit its influence up to the age of 65 years, and it appears that where overcrowding is most intense in London men from 65 to 75 years of age die as frequently from phthisis as the males of all England do when their mortality is highest from this cause

In the face of overcrowding the declension of phthisis cannot proceed , it is this cause probably which accounts for London not improving so much as the whole country Some of its worst districts in this respect (the Strand and St Giles) seem not to have improved at all Nevertheless, overcrowding is not solely a question of air, it also spells poverty , and some of the instances where these two maps of London do not quite coincide are to be accounted for by the presence of numerous poor occupants of common lodging houses who, I gather from the information supplied by the medical officers of health of the Strand, Westminster, and Whitechapel, die about twice as frequently from phthisis as all the occupied males of London, and there are other instances where a large amount of pauperism accounts for the increase of phthisis being more marked than that of overcrowding

CLIMATE

Climate has not changed but the clothing which defends us against its evil influence has changed In children and women a larger surface of the body is covered and with woollen materials, a much more protective covering

The causes of declension are also determining factors in the production of a variation in mortality from phthisis in separate localities at the same period By comparing the age incidence of different districts a better estimate can be formed of the influences which promote or prevent the declension of phthisis than if it is sought in the slighter variations which occur in the rate of their declension

RURAL DISTRICTS

First inspecting two rural districts, Herefordshire and North Wales, a great similarity may be noted in the age incidence of their curve, but North Wales, at each age, very greatly exceeds Herefordshire Of the factors previously named but few can be found to account for this difference It can hardly be claimed that the Eisteddfod causes much more infection among the Welsh, or that heredity by their closer intermarriage is an agent, because they have declined more than their neighbours When we turn, however, to acquired susceptibility all my informants agree that in the nutrition of the people, though it be no doubt much improved, Wales stands in a peculiarly adverse position. There is a difficulty in obtaining butcher's meat in the more out-of the way districts, and where the communities are larger the custom prevails among those hard working people of a bread and-butter midday meal, with jorums of well-stewed tea In 1896 a Departmental Committee on the Quarries reported to Parliament that "the men take too little nitrogenous food and drink too much stewed tea." The same committee said that "the cold damp climate was an important factor in causing diseases of the respiratory system and many of the houses were damp" Pneumonia is prevalent in Wales but zymotic diseases, occupation, and probably ventilation (they have always regarded fresh air as an enemy and are most tenacious of habits) cannot be said to differ very much in these two districts Accordingly we are driven to the conclusion that the stamina of the lung is impaired

TABLE V.—*Showing the Deaths from Phthisis in Groups of Sanitary Districts of London arranged with Respect to Overcrowding of their Population*

Phthisis Deaths 1897

Districts with overcrowding *	All ages	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and upwards
under 10 per cent.	458	15	6	14	29	43	122	115	76	36	9	3
from 10 to 20 per cent	3360	137	47	45	185	279	791	850	607	291	108	20
20 30 "	2321	69	24	20	99	199	454	671	462	253	58	1[illegible]
over 30 per cent.	1543	60	10	11	60	94	336	439	315	153	55	10

Phthisis Death rates per 1000 Living, 1897

Districts with under 10 per cent.	0·32	0·14	0·34	0·69	1·07	1·82	2·36	2·19	1·63	0·71	0·60
from 10 to 20 per cent	0·52	0·20	0·20	0·8	1·25	2·03	3·10	3·12	2·51	1·63	[illegible]
" 20 30 per cent.	0·43	0·19	0·17	0·83	1·55	2·13	4·36	4·21	3·61	1·64	[illegible]
" over 30 per cent.	0·74	0·14	0·17	0·96	1·54	3·30	5·76	5·91	4·80	3·23	[illegible]

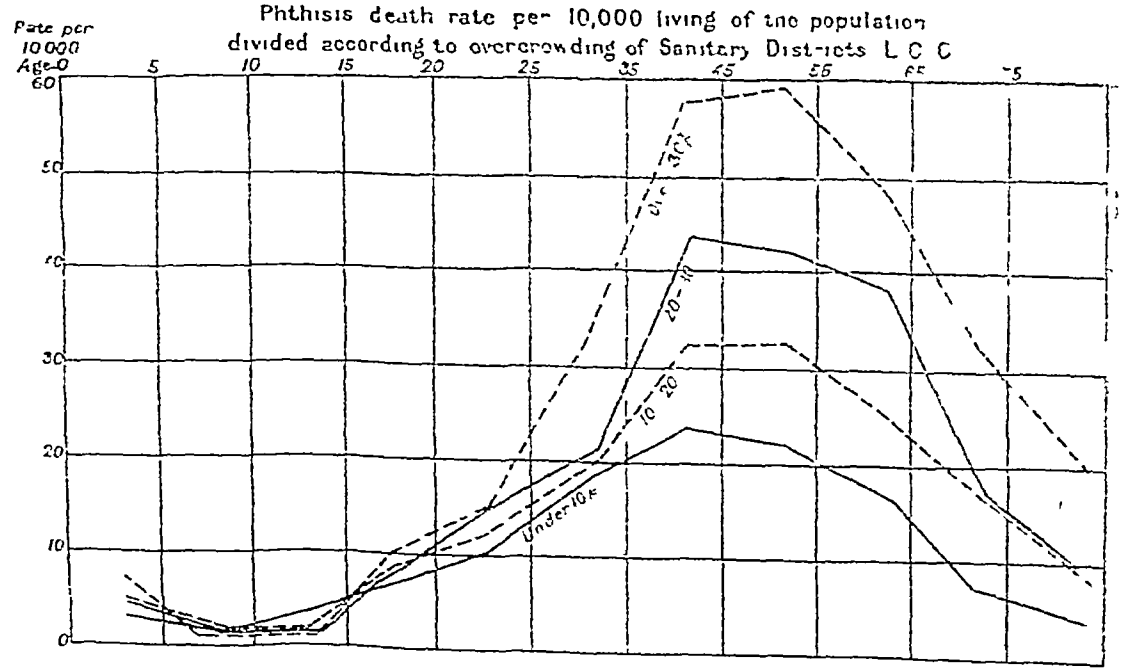
Phthisis, Comparative Death rates Death rates in least Overcrowded Group at each Age taken as 100

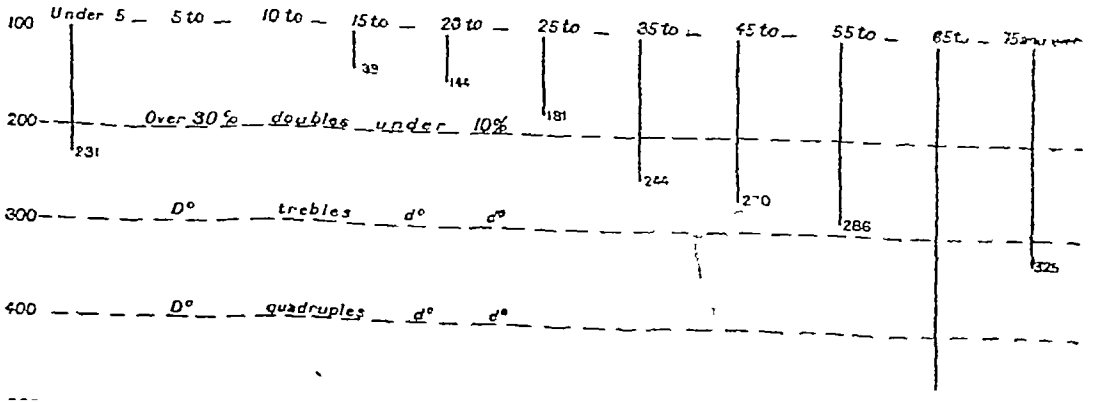
Districts with under 10 per cent.	100	100	100	100	100	100	100	100	100	100	100
from 10 to 20 per cent.	162	143	59	122	115	114	131	142	149	230	13[illegible]
20 30 per cent.	150	136	50	120	145	117	185	192	227	231	15[illegible]
over 30 per cent	231	100	50	139	144	181	2[illegible]4	270	2[illegible]	4[illegible]	32[illegible]

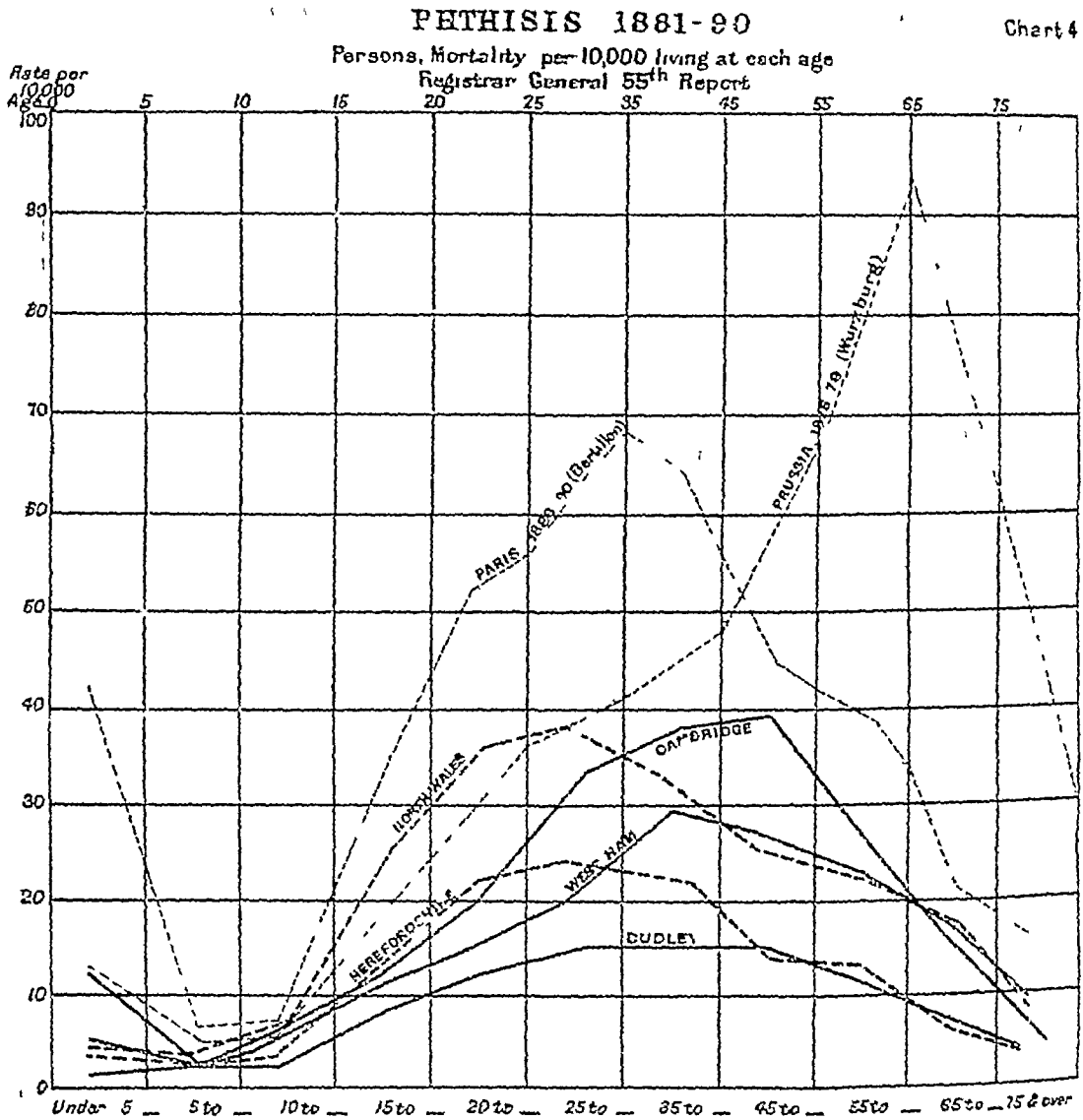
* Overcrowding"—living more than two in a room in tenements of less than five rooms.

LONDON 1897 Chart 3

Phthisis death rate per 10,000 living of the population divided according to overcrowding of Sanitary Districts L C C







by malnutrition and further damaged by climatic influence This prepares the soil for the seeds of tuberculosis to such an extent that the phthisis rate of Wales continues nearly to double that of Herefordshire

RURAL COUNTIES COMPARED TO TOWNS

Taking the age curve of either district and comparing it with the samples of the English towns Dudley and West Ham, two features distinguish urban from rural populations—the maximum is at a later age and the rate is comparatively high in old age Cambridge, by its rural attributes, presents little of this urban feature These samples are but instances of a rule which seems to hold good for the rural counties and the towns of England The explanation seems largely to lie in a remark of the experienced Mr Booth, who writes "Life for old people is easier in the country, rents are lower, continued earnings more possible, friendly assistance in case of need more sure"

We must not, however neglect another agent perhaps of equal influence—overcrowding, in the towns it is half as prevalent again as it is in the country, and Chart 3 shows that an increasing effect is produced as age advances, accounting for the maximum appearing at a later age period in the towns and for the prevalence in old age

On proceeding to compare these three towns, Dudley, West Ham, and Cambridge, their curves form no doubt a good illustration of how different occupations and surroundings affect the mortality from phthisis, for all that, the intricacies of the subject defy full investigation All of these towns have made much progress since the period 1861 to 1870 Dudley then suffered much as West Ham did in the period 1881 to 1890 West Ham stood where Cambridge stands and Cambridge was almost in the position Paris is depicted in

West Ham is an instance of a densely populated and thriving town whose inhabitants are occupied as much indoors as out, the male rate considerably exceeding the female rate Here zymotic disease is prevalent and overcrowding is moderate, yet it is below the phthisis rate for England and Wales Its good health is somewhat exaggerated, those of its inhabitants dying in London institutions not being included in the past three years it would represent an addition of 10 per cent

Cambridge may be taken as an example of old residential towns, neither the presence of undergraduates nor of a county hospital determines the curve of incidence drawn Cambridge exhibits (among its men especially) a phthisis rate exceeding such towns as West Ham, for which I can find no further reasons than such as were noted when comparing North Wales with Herefordshire—namely, a lower standard of nutrition (implied by lower wages and higher priced food) and damp Zymotic disease, unhealthy occupations, diseases of the respiratory system, and overcrowding do not seem to be attributes of this town

Dudley enjoys a comparative immunity from phthisis which one was at first sight inclined to attribute to the smoke of the Black Country, from the heart of which it rises, built on the top of a long slope of hill with a good fall on nearly every side It has many attributes—slums, overcrowding, abundant zymotic disease and exceptional

prevalence of respiratory disease—all of which may dispose to phthisis Though not engaged in textile industry women suffer more than men whose occupation, largely in collieries, exercises a good influence, the origin of which has not yet been fully determined The situation of Dudley by its airiness elevation, and dryness of soil, the nutrition of its inhabitants by their very high wages and decidedly meat eating propensities mark alone conditions which should place the town above many While from a distance it seems to be covered by a pall of smoke, Dr T F Higgs notes that gases are quickly driven away SO_2, the agent which the late Dr Andrew considered conferred some immunity on Röros, is not more prevalent according to Mr H D A Ellis and other informants than in other large towns Dr C A MacMunn, while calling attention to the great production of phenols and gases from the furnaces, does not suggest that the heavy gases are permeating the atmosphere However, seeing how low the rate is on either side of the age of occupation some exceptional influences are probably at work

PARIS AND PRUSSIA

Paris and Prussia are a contrast to what usually obtains in this country Paris while equalling in adults the Cambridge mortality of 30 years ago is conspicuously different from Cambridge at that time in the heavier incidence on youths to age 20 I understand that this heavy mortality without declension has been the fate of Paris for 30 years The early age incidence and the absence of declension are alike due in my opinion to the vegetable diet and to those economical conditions which have allowed the Paris *ouvrier* to advance so little compared with the British workman It is true that the Office of Works of French Industry shows that the rise of wages in Paris has been no less than in England, but it also tells that the present wage is 10 per cent. less and the cost of living, according to M Bienaymé, has since 1880 increased 10 per cent We know the enormous decrease in the cost of living here

As to Prussia I have made no inquiry, the curve forcibly suggests by its resemblance to that of the most overcrowded districts of London that it has its explanation in the same cause, faulty ventilation The only rate in England which I have seen to exceed this is found among the tin and lead miners, in whom the rate is nearly double that of Prussia between the ages of 55 and 65 years and after 65 years, judging, however, from small figures, only 80 deaths from phthisis Damp, malnutrition, and exposure affect these men, but it is doubtless the stagnancy of the mine atmosphere (styled with a fine unconscious irony "natural ventilation") that induces this enormous mortality late in life

Sir Hermann Weber in the Croonian Lectures, said of these Prussian figures "Part of the difference (from other countries) may be accounted for by the fact that during the much colder winters in Prussia old people are more confined to narrow ill ventilated stove-heated rooms than is the case in England where the cold is never great and where open fireplaces do not allow the air to be vitiated to the same degree"

Despite the great declension of phthisis all over England different districts like those already mentioned still exhibit much evidence of difference in susceptibility It seems not too much to say that nothing more haphazard is seen than in non-infective diseases—fortuitous increase of mortality is not apparent, when death returns and local agencies inducing susceptibility are considered together they confirm the common opinion avoiding susceptibility one avoids infection.

COUNTIES OF ENGLAND

A general observation of available data in the counties of England tells the same tale of a mortality rising as visible agents of susceptibility preponderate

The Registrar General has afforded the best opportunity of comparison in counties having corrected the death rate and the phthisis rate in the past decennium for age and sex distribution of their populations. The advantage of comparing larger numbers of population outweighs any disadvantage in comparing areas which by their size lose some distinctness in local characters these local attributes will still be found to be sufficiently distinct

Before briefly comparing the mortality from phthisis in the counties of England it is well to consider, first the general equality of incidence of that mortality, secondly, how far migration has effect upon the death returns, and, further, what kind of additional information is afforded by taking into account the concurrent mortality from all causes

EQUAL INCIDENCE

Attention has repeatedly been called to the inequalities of the phthisis rate in different sanitary areas Attention may equally be given to the remarkable evenness of rates in the counties of England—I have found it necessary to use gradations of only 7½ per cent to map them—and, further, that evenness extends to the sanitary areas The rate is so steady that small areas having only from 100 to 200 deaths in a decennium will show but very little variation in rate throughout their county Suburban counties are often an exception to this rule, Essex beyond the suburban district is as bad as Suffolk, and Kent and Surrey are very variable; but even here nothing like the incidence of London appears, where the Strand and St Giles triple the rate for Lewisham and Hampstead London stands almost alone in its tremendous contrasts Except in those areas where differences in occupations and prosperity are nearly as vast as in London, instances of phthisis rate for one sex only being doubled can with difficulty be found when we compare one sanitary area with another in the same county

Men vary more than women in their mortality from phthisis and in their occupation, so men by their indoor occupation in towns of some rural counties are found to have double the phthisis rate of the area which has the lowest rate in the county Such towns are Canterbury, Chichester, Oxford, Cambridge, Exeter, Bristol, Worcester, Coventry, Leicester Nottingham Redruth, and Biggleswade Occupational influence in northern counties can often provide several instances

On the other hand no such instance is to be found in Norfolk, Essex Bucks, Hertfordshire, Wilts Somerset, Dorset Hereford, Shropshire, Lincolnshire, and Northamptonshire while Surrey, Berkshire, Suffolk, and Cumberland are probably in the same category

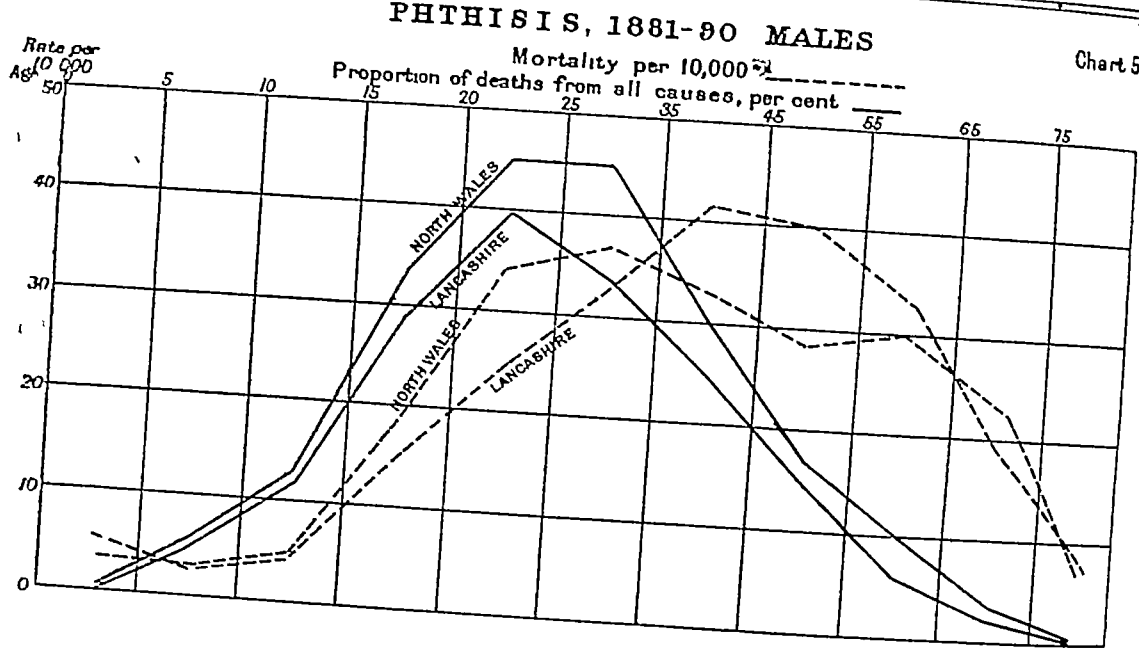
Towns are not infrequently among the least affected districts in a county, such towns are usually well to-do and often new as those within London influence—West Ham, Romford Richmond, Croydon, and Watford, also the growing towns—Eastbourne, Reading, and Lowestoft In manufacturing towns this exceptionally good position is rare, Dudley and Pontypridd with their coal mining and smelting of iron may be noted

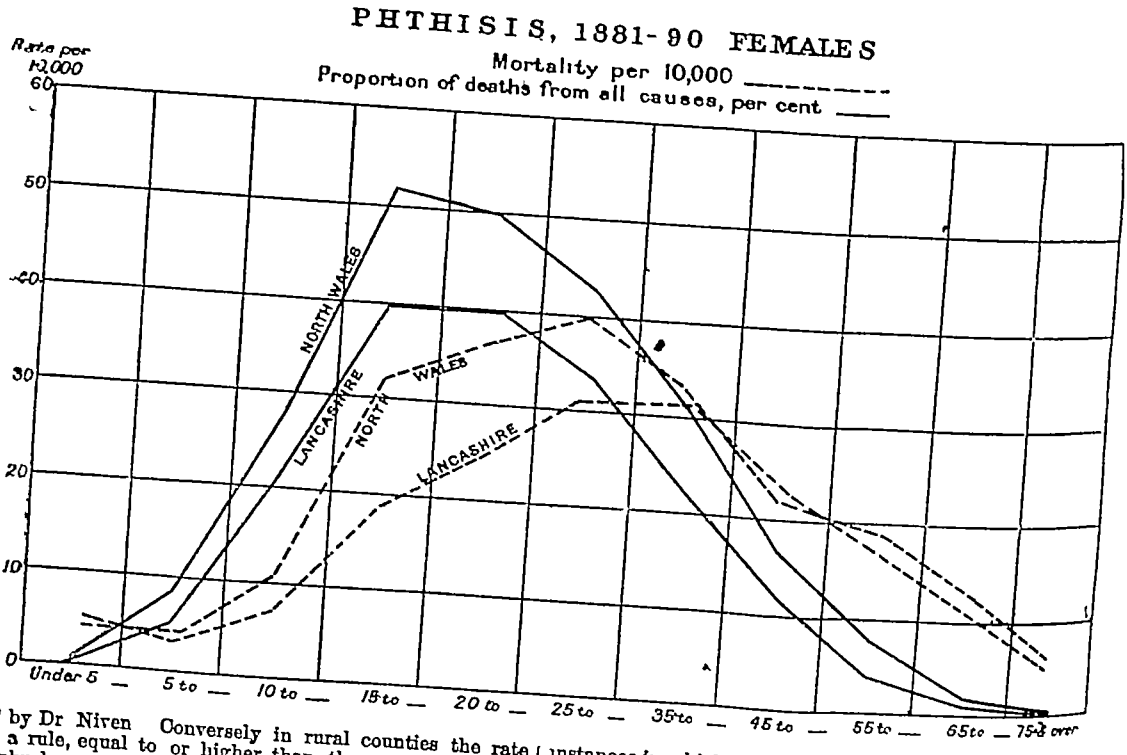
That a specific and contagious disease should be so stable in its incidence and so independent of density of population is remarkable This aspect of phthisis harmonises with that straightness of the curve year after year in England which was commented upon by Dr Longstaff who in this respect compared it to cancer, apoplexy, paralysis, and convulsions

MIGRATION

The question of the influence of migration upon the death returns is not unimportant Is it true that migration (people returning home or seeking the country to die) accounts for the healthiness of towns? in other words, are rural districts not responsible for their phthisis rate? Inquiring first of medical officers of health of district areas, West Ham sends a large number of its patients to the neighbouring London hospitals, its artisan inhabitants cannot afford to send many away to a distance Dr Sanders states that in the past three years there has been referred to his district a number of deaths from phthisis occurring in London institutions which amount to 10 per cent of those occurring in the district It is not, then, migration which has been responsible for the low phthisis rate of West Ham In Norfolk two rural districts have recently had every death from phthisis in the past 20 years surveyed, Dr. Plowright investigating the Freebridge Lynn district, a population of about 12,000, and Mr T L Lack the village of Hingham They found that 10 per cent were imported cases, several being from other parts of the county and several from the army; no record of any cases leaving the district and dying elsewhere could be given If their few figures relating to in all about 300 deaths from phthisis, are, as I believe a fair sample of the experience of rural districts the rural incidence cannot be said to be masked by migration

Seeking evidence, secondly, from age incidence in the counties, at the ages of 10 to 20 years emigrants from the towns are few (they were less than 4 per cent in the Norfolk data) yet on taking the phthisis rate of London and the four surrounding populous counties at this age of less migration and again the rate of the age groups from 20 to 35 years when emigrants are more numerous it is evidently in either case a lower rate than that for England, as has been





noted by Dr Niven Conversely in rural counties the rate is, as a rule, equal to or higher than, the rate for London and suburban counties at age 10 to 20, as well as for the ages 20 to 35 Finally, if the county of least immigration—Cornwall—is analysed the rate is no lower than in other rural counties and it is higher than in London Figures are appended giving age group rates, they show that in early life rural districts have higher rates, for girls particularly

From all these data I conclude that rural counties have no such increase by immigration at any age as to mask the phthisis that originates in the county and that the figures of the Registrar General's returns truly tell the county phthisis rates I am satisfied that in these maps a county would rarely if ever have to change a grade on that account

If one attempted to correct the map of phthisis mortality further than for age and sex there are only two or three instances in which the evidence appears to make it desirable Surrey might claim that it had an unfair share of asylums which add to the rate as much as a hospital for consumption, Hampshire that it held military and naval hospitals with many deaths from phthisis, and in the latter county the medical men at Bournemouth would doubtless protest that their patients came there too late

PROPORTION OF DEATHS FROM PHTHISIS

In explanation of Map E giving the proportion of deaths from phthisis to all deaths for the counties Chart 2 may be referred to which expressed this liability to die from phthisis for every age group of England and Wales The map expresses it for each county by combining all the age groups into an all age proportion rate This combination can as reasonably be made as in the case of mortality per

000 living or even more so, because the character of the curve of ratio of deaths from phthisis to all deaths runs more consistently through all age groups than does the curve for mortality If one age group is above or below the mean for England and Wales almost all are, while the curve mortality per 1000 living shows much less consistency Figures are appended (Appendix II) giving the ratio at ages from 25 to 35 years for all the counties They have just the same local relations as when taken for all ages, except in a few cases where the incidence is exceptionally heavy in later life. Chart 5 gives an example of the consistency of the curve for either sex, comparing North Wales with Lancashire

mark this coincidence by the rate of death proportion showing a greater number bordering upon the mean than the rate of mortality per 1000 living The death ratio map then eliminates much of widespread evil influences, as overcrowding in towns, which Mr Shirley Murphy showed predisposed to many causes of death, increasing the death-rate for such districts in London by one half, while it doubled the phthisis rate Good influences are similarly in part eliminated, especially those attributes which give rural districts such a low mortality Clearer indications remain as to the influence of locality upon liability to phthisis by thus discounting the healthiness or unhealthiness of counties as shown by the total death rate

TABLE VI —*Showing the Comparative Mortality of Males from 25 to 65 Years of Age (1890–92) from all Causes and from Phthisis, corrected for Age Constitution in the Four Decennia for 61,215 Men engaged in each Occupation (Part II, Supplement, 55th Report of the Registrar General)*

—	All causes	Phthisis.	Phthisis (occupied males taken as 100)	—	All causes	Phthisis	Phthisis (occupied males taken as 100)	Occupations placed in order of the proportion per cent phthisis deaths bear to deaths from all causes	
Messenger	1222	325	175	Costermonger (22) ..	1652	443	239	Tobacconist ..	2[illegible]
Gunsmith	1228	325	175	Docker	1829	325	175	Tailor ..	2[illegible]
Hatter	1109	301	162	Innkeeper (139)	1642	259	139	Costermonger ..	2[illegible]
Hairdresser	1099	276	149	Tobacconist..	1002	220	151	—	—
Draper (136)...	1014	260	140	Law clerk	1070	272	147	—	
Shoemaker (119)...	920	256	133	Tailor (134) ..	929	271	146	—	
Saddler...	924	243	133	Chimney sweep	1311	260	140	—	—
Hatchmaker	956	234	130	Cab service	1153	229	123	Law clerk	2[illegible]
Bricklayer	1001	225	121	Seaman...	1352	223	123	Domestic servant	2[illegible]
Locksmith	920	223	120	Commercial clerk ..	915	218	117	Railway clerk	2[illegible]
—	—	—	—	Coalheaver	1526	215	116	Commercial clerk	2[illegible]
Wool manufacturer	991	191	103	Carman	1234	195	105	Carpenter ..	2[illegible]
Coachmaker	1040	189	102	Railway office clerk	771	194	104	Cab service	2[illegible]
Baker	920	185	100	Domestic servant	757	186	100	Chimney-sweep ..	2[illegible]
—	—	—	—	—	—	—	—	Grocer	1[illegible]
Occupied males	9[illegible]	1[illegible]	100	*Occupied males*	9[illegible]	18[illegible]	100	*Occupied males*	10[illegible]
Chemist	925	180	97	Carpenter (95) ..	783	172	93	Agricultural labourer	1[illegible]
Fishmonger...	953	160	86	Milkseller	1051	166	90	Railway guard	1[illegible]
Blacksmith (102)	914	159	86	Manufacturing chemist	1392	162	87	Docker ..	[illegible]
—	—	—	—	—	—	—	—	Seaman...	1[illegible]
—	—	—	—	—	—	—	—	Innkeeper ..	1[illegible]
Greengrocer	946	154	83	Railway guard, porter &c.	825	147	79	Milkseller	15
Corn miller	845	143	77	Grocer (73)	664	131	70	Carman... ..	15
Platelayer	1055	129	70	Agricultural labourer (57) ...	632	115	62	Coalheaver ..	14
—	—	—	—	—	—	—	—	Farmer	14
Tanner	756	115	62	Farmer	563	79	42	Clergyman	12
Coal merchant	803	95	51	Engine-driver on railway ...	810	76	41	Manufacturing chemist.	11
Brickmaker...	741	84	45	Clergyman	533	67	36	Engine-driver on railway ..	[illegible]

A table of occupations draws this same comparison among classes of men at those ages during which phthisis is twice as prevalent as it is during the whole of life You may judge whether the liability to phthisis is best expressed—first, by comparing their mortality in the middle column, secondly, by comparing the frequency with which they die from this disease in proportion to all other forms of death in the last column

The docker and the innkeeper have a very high mortality from phthisis but not higher than that from many other diseases Their liability to die from phthisis is but a part of their liability to all kinds of death, a fuller judgment of liability to phthisis is afforded by taking into view their low proportion of deaths from this cause as shown in the last column. The last column, on the other hand, shows that such indoor workers as grocers, carpenters and domestic servants, though with a low rate in the mortality column, possess a proclivity above the average to this kind of death. (In the table deaths from accidents have not been eliminated, such amendment would not alter the order set down.)

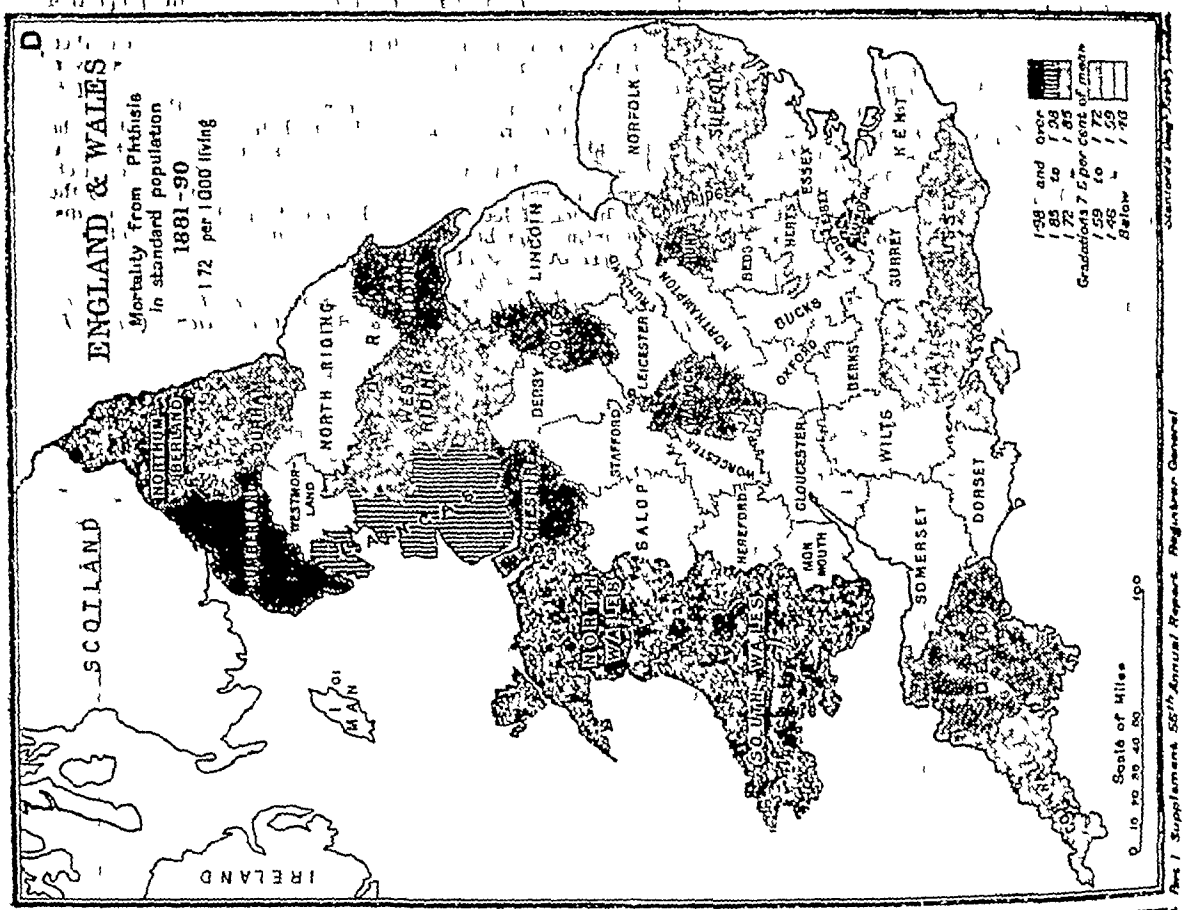
The causes leading to death from phthisis are numerous, diverse, and comprehensive, so much so, it would seem, that the same are also the agencies leading to a large proportion of other deaths Both occupations and counties

In considering for locality the causes that affect the phthisis rate in the counties the local influence of tuberculous zymotic, and respiratory system disease will be neglected Their relation to phthisis is neither close nor constant

OCCUPATION

Occupational influence is marked by the death rate for all causes falling upon the counties according to the aggregation of their population in the towns The 11 counties London Monmouth, Warwick, Staffordshire Notts, East York, West York, Lancashire Cheshire Northumberland, and Durham, alone have a general death rate above the mean for England, owing to their population being mainly concerned with trade and manufacture, and to their dwelling in the towns (Map C) Worcester, Gloucester, Derby, and London suburban counties also consist largely of trading populations, but they join all the other counties in England in being below the mean death rate

Intimate as is the connexion of the phthisis rate (Map D) with the general death rate it fails to follow that rate when it is above the mean in the manufacturing counties as often as not, it is only in London, Lancashire, West York, Durham, and Northumberland that the phthisis rate rises above the mean, the comparative immunity of the other counties shows that excess of phthisis need not accompany town occupations


D
ENGLAND & WALES
Mortality from Phthisis
in standard population
1881-90
1·72 per 1000 living
SCOTLAND
IRELAND
NORTHUMBERLAND
DURHAM
WESTMORLAND
NORTH RIDING
WEST RIDING
EAST RIDING
LINCOLN
NORFOLK
SUFFOLK
CAMBRIDGE
HUNTS
BEDS
HERTS
ESSEX
KENT
SURREY
SUSSEX
BUCKS
OXFORD
BERKS
NORTHAMPTON
LEICESTER
RUTLAND
STAFFORD
WARWICK
WORCESTER
HEREFORD
GLOUCESTER
MON MOUTH
WILTS
HANTS
DORSET
SOMERSET
DEVON
CORNWALL
DERBY
CHESHIRE
SALOP
NORTH WALES
SOUTH WALES
ISLE OF MAN
1·98 and over
1·85 to 1·98
1·72 to 1·85
Graduations 7·5 per cent of mean
1·59 to 1·72
1·46 to 1·59
1·46 Below
Scale of Miles
0 10 20 30 40 50 100
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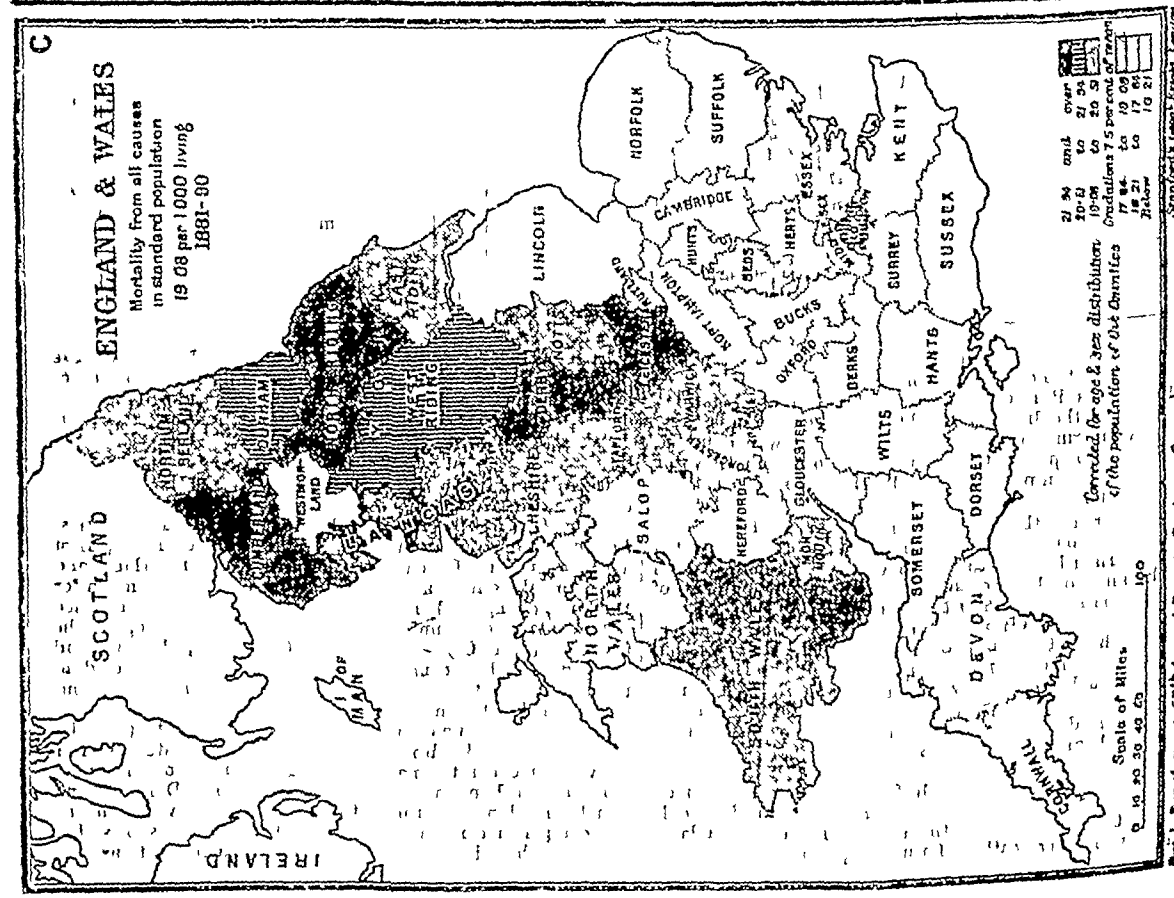
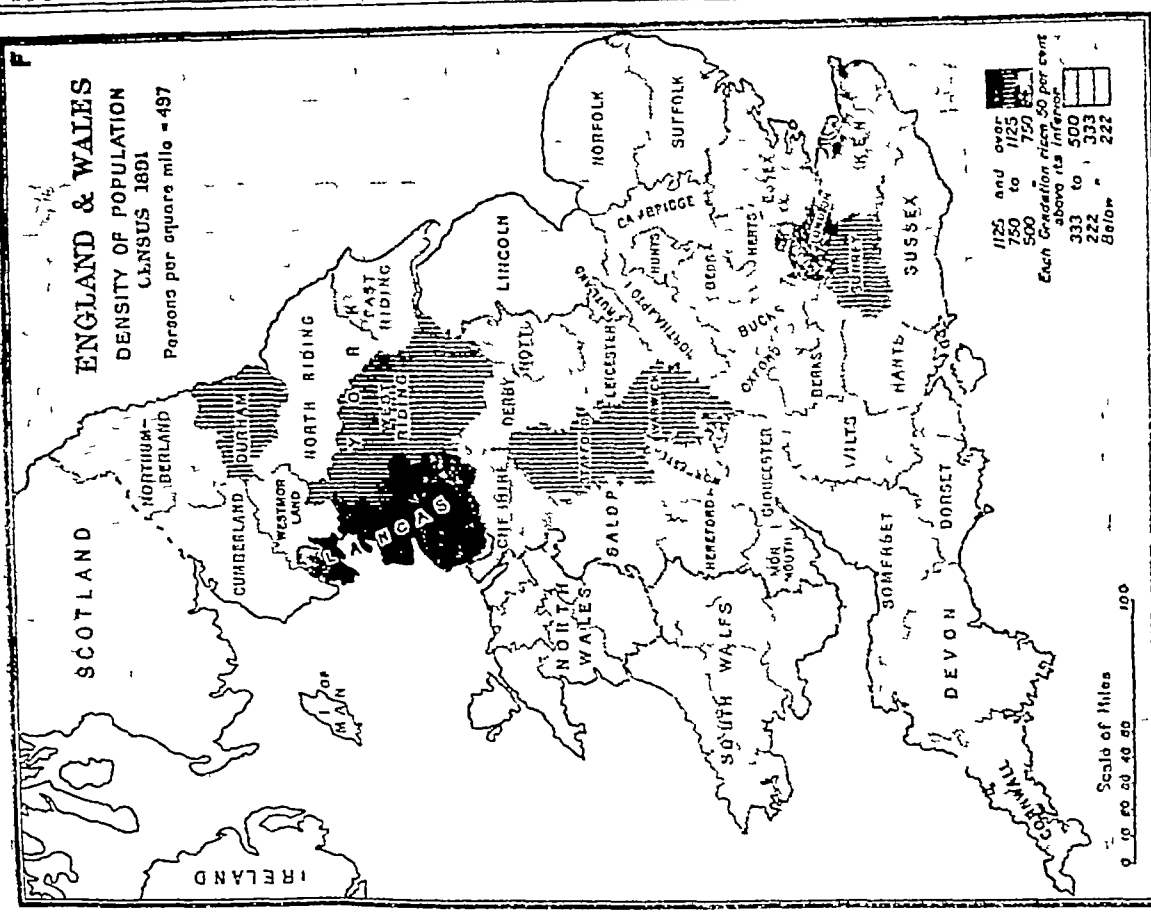
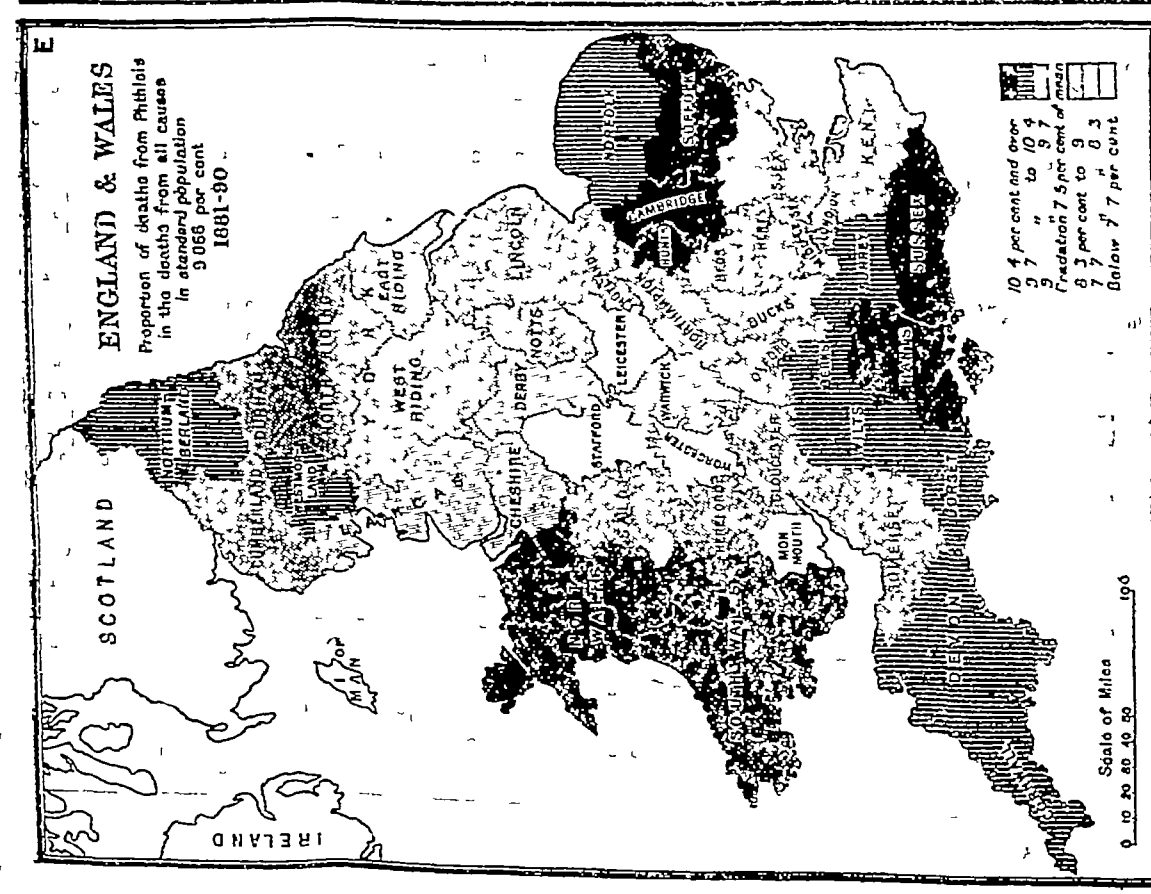
Stanford's Geog. Estab. London


C
ENGLAND & WALES
Mortality from all causes
in standard population
19·08 per 1000 living
1881-90
SCOTLAND
IRELAND
NORTHUMBERLAND
DURHAM
WESTMORLAND
CUMBERLAND
NORTH RIDING
WEST RIDING
EAST RIDING
LINCOLN
NORFOLK
SUFFOLK
CAMBRIDGE
HUNTS
BEDS
HERTS
ESSEX
KENT
SURREY
SUSSEX
BUCKS
OXFORD
BERKS
NORTHAMPTON
LEICESTER
RUTLAND
STAFFORD
WARWICK
WORCESTER
HEREFORD
GLOUCESTER
MON MOUTH
WILTS
HANTS
DORSET
SOMERSET
DEVON
CORNWALL
CHESHIRE
SALOP
NORTH WALES
SOUTH WALES
ISLE OF MAN
21·94 and over
20·61 to 21·94
19·08 to 20·61
Graduations 7·5 per cent of mean
17·94 to 19·08
18·21 to 17·65
17·65 Below
Corrected for age & sex distribution of the population of the Counties
Scale of Miles
0 10 20 30 40 50 100
Part I Supplement 56th Annual Report Registrar General
Stanford's Geog. Estab. London


F
ENGLAND & WALES
DENSITY OF POPULATION
CENSUS 1891
Persons per square mile = 497
SCOTLAND
IRELAND
NORTHUMBERLAND
CUMBERLAND
DURHAM
WESTMORLAND
NORTH RIDING
YORK
EAST RIDING
WEST RIDING
LANCAS
CHESHIRE
DERBY
NOTTS
LINCOLN
LEICESTER
RUTLAND
NORTHAMPTON
HUNTS
CAMBRIDGE
NORFOLK
SUFFOLK
ESSEX
HERTS
BEDS
BUCKS
OXFORD
BERKS
WARWICK
STAFFORD
SALOP
HEREFORD
GLOUCESTER
MONMOUTH
NORTH WALES
SOUTH WALES
WILTS
HANTS
SUSSEX
SURREY
KENT
SOMERSET
DORSET
DEVON
CORNWALL
I. OF MAN
Scale of Miles
0 10 20 30 40 50 100
1125 and over
750 to 1125
500 " 750
Each Gradation rises 50 per cent above its inferior
333 to 500
222 " 333
Below 222
Stanford's Geog^l Estab^t London


E
ENGLAND & WALES
Proportion of deaths from Phthisis in the deaths from all causes in standard population
9 066 per cent
1881-90
SCOTLAND
IRELAND
NORTHUMBERLAND
CUMBERLAND
DURHAM
WESTMORLAND
NORTH RIDING
YORK
EAST RIDING
WEST RIDING
CHESHIRE
DERBY
NOTTS
LINCOLN
LEICESTER
RUTLAND
NORTHAMPTON
HUNTS
CAMBRIDGE
NORFOLK
SUFFOLK
ESSEX
HERTS
BEDS
BUCKS
OXFORD
BERKS
WARWICK
STAFFORD
WORCESTER
HEREFORD
GLOUCESTER
MONMOUTH
NORTH WALES
SOUTH WALES
WILTS
HANTS
SUSSEX
SURREY
KENT
SOMERSET
DORSET
DEVON
I. OF MAN
Scale of Miles
0 10 20 30 40 50 100
10 4 per cent and over
9 7 " to 10 4
9 " " 9 7
Gradation 7 5 per cent of mean
8 3 per cent to 9
7 7 " " 8 3
Below 7 7 per cent
Stanford's Geog^l Estab^t London

APPENDIX I.—*Showing the Phthisis Mortality per 1000 living in 1881–90. Extracted from Part I., Supplement 55th Annual Report of the Registrar General. Figures partly taken from Mr. Welton's, Manchester Statistical Society, 1896.*

—	Under 5		5–		10–		15–		20–		25–		35–		45–		55–		65–		75 and upwards	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
London	0·72	0·67	0·25	0·30	0·29	0·53	1·17	1·20	2·26	1·62	3·60	2·59	5·30	3·24	5·47	2·58	4·64	1·82	2·70	1·05	1·14	0·52
Middlesex	0·54	0·56	0·20	0·23	0·28	0·49	0·81	1·02	1·68	1·20	2·41	2·06	3·04	2·24	3·53	1·84	2·93	1·34	2·25	0·79	0·61	0·50
Surrey	0·55	0·47	0·16	0·23	0·27	0·49	0·95	1·28	1·62	1·49	2·86	2·00	3·75	2·39	3·63	2·17	3·41	1·73	2·65	1·17	1·32	0·53
Kent	0·57	0·49	0·25	0·28	0·31	0·65	0·98	1·73	1·94	2·12	2·62	2·50	2·97	2·48	2·88	1·99	2·31	1·45	1·77	0·87	0·57	0·43
Essex	0·51	0·48	0·21	0·25	0·31	0·67	1·00	1·63	1·78	2·03	2·36	2·21	2·87	2·53	2·90	1·98	2·64	1·48	1·93	1·19	0·60	0·43
Sussex	0·46	0·43	0·19	0·26	0·28	0·55	1·65	1·60	2·38	2·07	3·41	2·50	3·77	2·62	3·59	2·02	2·97	1·49	1·66	0·80	0·60	0·17
Hampshire	0·44	0·45	0·19	0·24	0·22	0·56	1·27	1·78	3·03	2·34	4·12	2·83	4·20	2·88	3·66	2·12	2·57	1·47	1·53	1·01	0·59	0·23
Devon	0·66	0·67	0·20	0·29	0·31	0·73	1·27	1·87	2·61	2·61	3·32	2·85	3·14	2·51	2·73	1·88	2·52	1·72	1·79	1·34	0·63	0·43
Cornwall	0·95	1·09	0·17	0·20	0·27	0·83	1·33	2·11	2·72	2·86	2·73	2·76	2·62	2·19	3·62	1·75	4·36	1·67	2·85	1·20	0·77	0·35
Norfolk	0·70	0·62	0·28	0·31	0·29	0·70	1·24	1·68	2·52	2·52	2·60	2·70	2·41	2·44	2·24	1·90	1·97	1·40	1·43	1·00	0·38	0·21
Suffolk	0·53	0·58	0·24	0·32	0·34	0·83	1·31	2·34	2·90	3·10	3·32	3·11	2·86	2·85	2·83	2·08	2·43	1·65	1·36	1·27	0·47	0·52
Cambridge	0·76	0·79	0·21	0·28	0·24	0·77	1·08	2·21	2·70	2·93	3·01	3·04	3·29	2·48	2·72	2·03	2·35	1·44	1·56	0·99	0·66	0·24
Bedford	0·64	0·50	0·20	0·25	0·25	0·80	0·68	1·80	2·02	2·41	2·61	2·94	2·78	2·58	2·64	2·09	1·73	1·50	1·80	0·94	0·24	0·43
South Wales	0·73	0·69	0·37	0·48	0·52	1·10	1·78	2·57	2·86	3·21	3·04	3·57	2·79	3·33	3·01	2·48	3·27	2·02	2·82	1·56	1·17	0·63
North Wales	0·38	0·42	0·32	0·44	0·44	1·12	1·80	3·21	3·44	3·69	3·68	4·00	3·22	3·21	2·84	2·21	2·99	1·90	2·28	1·14	0·70	0·65
Cumberland	0·47	0·38	0·30	0·36	0·37	0·93	1·12	2·12	2·58	2·92	2·61	3·05	2·67	2·64	2·88	1·73	2·55	1·40	1·53	0·62	0·61	0·29
Northumberland	0·53	0·50	0·42	0·58	0·63	1·30	2·06	2·66	3·14	3·02	3·43	3·66	3·59	3·24	3·60	2·35	2·86	1·58	1·69	1·09	0·46	0·42
Durham	0·52	0·48	0·40	0·54	0·64	1·14	1·74	2·31	2·43	3·16	2·42	3·31	2·45	2·68	2·58	2·07	2·29	1·29	1·47	0·66	0·51	0·16
Lancashire	0·59	0·52	0·32	0·37	0·42	0·72	1·54	1·86	2·48	2·46	3·25	3·13	4·14	3·14	4·07	2·35	3·25	1·74	1·86	1·03	0·74	0·51
Cheshire	0·40	0·39	0·24	0·26	0·37	0·60	1·34	1·72	2·37	2·42	2·90	2·73	2·95	2·70	2·96	1·81	2·51	1·39	1·26	0·81	0·75	0·30
West Riding of Yorkshire	0·51	0·48	0·31	0·41	0·44	0·85	1·67	2·32	2·44	2·74	2·80	2·90	3·67	2·53	3·92	1·87	3·45	1·56	2·21	1·10	0·64	0·47
Warwick	0·34	0·30	0·14	0·23	0·24	0·45	1·04	1·34	2·25	1·78	3·12	2·30	4·04	2·53	4·07	1·93	3·44	1·48	1·79	1·01	0·71	0·25
Oxford	0·42	0·41	0·23	0·31	0·20	0·56	0·93	1·48	2·01	1·94	2·64	2·17	2·93	2·39	2·76	1·91	2·04	1·49	1·84	0·69	0·48	0·35
Westmorland	0·43	0·34	0·23	0·20	0·11	0·89	0·88	1·91	2·21	2·76	2·41	2·60	2·12	2·15	2·14	1·51	2·32	1·26	1·84	0·77	0·66	0·16
North Riding of Yorkshire	0·37	0·38	0·24	0·41	0·35	0·92	1·37	1·99	2·28	2·68	2·46	3·05	2·22	2·35	2·17	1·59	1·77	1·21	1·13	0·67	0·56	0·18
East Riding of Yorkshire	0·49	0·51	0·32	0·42	0·48	1·00	1·48	1·93	2·18	2·39	2·73	2·94	3·16	2·77	2·77	1·88	2·29	1·00	1·32	0·67	0·46	0·26
Lincoln	0·37	0·40	0·21	0·36	0·30	0·88	1·18	2·29	2·20	3·03	2·45	3·31	2·36	2·38	1·98	1·56	1·76	1·14	1·13	0·67	0·57	0·33
Rutland	1·29	0·69	0·07	0·29	0·14	1·08	0·63	1·51	2·11	2·66	2·60	3·03	1·39	2·41	1·72	0·66	1·47	0·46	1·45	0·35	0·00	0·00
Stafford	0·53	0·45	0·17	0·23	0·26	0·51	0·90	1·47	1·66	2·01	2·20	2·42	2·99	2·21	2·96	1·76	2·41	1·16	1·47	0·63	0·36	0·21
Derby	0·30	0·34	0·22	0·23	0·33	0·62	1·25	2·09	1·83	2·55	2·20	2·54	2·49	2·26	2·45	1·81	2·20	1·19	1·23	0·96	0·83	0·24
Nottingham	0·52	0·44	0·22	0·34	0·37	0·69	1·44	2·01	2·42	2·83	2·61	3·05	2·65	2·41	2·68	1·78	2·50	1·30	1·59	0·76	0·67	0·63
Leicester	0·40	0·37	0·13	0·21	0·28	0·42	1·06	1·60	2·22	2·08	2·55	2·34	2·64	2·05	2·37	1·44	1·70	0·81	0·81	0·34	0·21	0·11
Salop	0·38	0·38	0·21	0·28	0·21	0·62	0·72	1·77	1·90	2·40	2·95	2·86	2·37	2·12	2·26	1·44	2·13	1·18	1·36	0·80	0·49	0·37
Worcester	0·28	0·22	0·15	0·15	0·18	0·39	0·83	1·27	1·76	1·62	2·45	1·90	2·86	1·79	2·42	1·63	2·11	0·92	1·29	0·63	0·52	0·14
Hereford	0·31	0·39	0·11	0·27	0·21	0·55	1·11	1·64	2·09	2·52	2·29	2·58	2·20	2·21	1·90	1·25	1·57	0·98	0·74	0·52	0·53	0·25
Monmouth	0·69	0·49	0·21	0·32	0·30	0·57	0·98	2·12	1·65	2·55	2·19	3·15	2·19	2·60	1·84	1·68	2·04	1·14	1·29	0·58	0·39	0·23
Northampton	0·71	0·66	0·21	0·24	0·27	0·61	1·12	1·74	2·21	2·10	2·40	2·54	2·66	2·36	2·41	1·50	1·86	1·16	1·35	0·95	0·38	0·48
Huntingdon	0·67	1·00	0·32	0·19	0·10	0·69	0·98	2·12	2·56	3·72	2·71	3·38	2·68	1·81	2·32	1·47	2·24	1·37	1·57	0·90	0·35	0·22
Bucks	0·44	0·52	0·11	0·21	0·13	0·49	0·78	1·38	2·10	1·90	2·50	2·58	2·37	2·49	2·27	1·69	1·82	1·40	0·98	0·93	0·35	0·19
Hertford	0·34	0·37	0·11	0·22	0·22	0·66	0·86	1·79	2·25	2·40	3·03	2·35	3·41	2·16	2·89	1·57	2·46	1·23	1·32	0·74	0·56	0·13
Gloucester	0·49	0·50	0·18	0·27	0·21	0·67	1·04	1·57	2·28	2·10	2·93	2·51	3·13	2·40	2·72	1·87	2·06	1·20	1·34	0·74	0·40	0·34
Somerset	0·29	0·33	0·14	0·20	0·23	0·45	1·05	1·63	2·36	2·34	2·99	2·41	2·88	2·06	2·48	1·56	1·82	1·10	1·08	0·65	0·47	0·24
Dorset	0·40	0·48	0·11	0·15	0·21	0·54	1·07	1·73	2·17	2·50	2·69	2·69	2·38	2·23	2·08	1·69	1·60	1·34	1·49	1·03	0·75	0·45
Wilts	0·45	0·50	0·17	0·27	0·27	0·51	0·95	1·96	2·04	2·80	2·89	2·80	2·60	2·33	2·60	1·77	2·05	1·22	1·15	1·00	0·53	0·25
Berkshire	0·73	0·63	0·16	0·24	0·16	0·46	0·83	1·40	2·22	2·18	2·66	2·28	3·10	2·25	3·02	1·71	2·63	1·49	1·80	1·10	0·57	0·52
England and Wales	0·55	0·51	0·25	0·32	0·33	0·69	1·28	1·79	2·32	2·31	3·02	2·78	3·56	2·73	3·49	2·05	2·92	1·51	1·81	0·97	0·68	0·39

APPENDIX II.—*Showing the Mortality per 100,000 in Standard Population, 1881–90.*

—	Population for 1881–90 in thousands.	All ages. All causes.	All ages. Phthisis.	25 to 35. All causes.	25 to 35. Proportion per cent. due to phthisis.	Census 1891: population per cent. of overcrowding.	Royal Commission on Labour: agricultural labourer's wage, about 1893.
England and Wales ...	27-53	1933	172	732	33	11	—
London	4211	21-2	200	771	41	19	—
Surrey	572	1558	156	640	37	2	16s.
Kent	806	1594	152	669	33	3	15s.
Sussex	554	1494	166	64-	44	3	12s.—14s.
Hampshire ...	666	1600	18-	777	43	2	—
Berkshire	268	1502	1-9	636	37	5	—
Middlesex ..	575	1662	139	611	33	6	—
Hertfordshire	215	1541	150	656	40	5	12s.—15s.
Buckinghamshire	16-	1526	135	626	33	5	13s.—1-s.
Oxfordshire ..	183	1515	143	623	38	7	12s.—15s.
Northamptonshire	308	1621	145	631	39	5	13s.—1-s.
Huntingdonshire	50	1394	164	610	49	6	12s.
Bedfordshire ...	166	1630	15-	6-5	43	4	12s.—13s.
Cambridgeshire	195	15-0	173	600	4-	6	12s.—13s.
Essex	761	1632	147	621	36	5	12s.—13s.
Suffolk	353	1529	180	694	45	6	12s.—13s.
Norfolk	460	1558	155	669	39	6	12s.—13s.
Wiltshire	255	1496	151	678	4-	6	—
Dorsetshire ..	189	1424	142	631	42	5	—
Devonshire ...	636	1656	171	727	42	10	13s.
Cornwall	318	1718	178	673	40	6	13s.—15s.
Somersetshire...	510	1550	1-1	561	-0	4	15s.
Gloucestershire	5-8	1629	151	623	39	6	11s.—15s.
Herefordshire	113	1501	130	660	36	3	12s.—15s.
Shropshire ...	254	1551	142	716	53	10	11s.—16s.
Staffordshire ..	1103	1999	139	724	31	10	12s.—18s.
Worcestershire	422	1686	121	604	36	8	—
Warwickshire ..	801	1925	161	727	37	11	16s.—18s.
Leicestershire	379	1792	131	634	38	3	1-s.—17s.
Rutlandshire ..	22	1-20	136	5-5	51	7	—
Lincolnshire	-67	1594	152	712	-0	4	13s. 6d.—14s.
Nottinghamshire	505	1913	162	722	38	4	13s.—15s.
Derbyshire ..	432	1788	143	669	35	6	13s.—18s.
Cheshire	788	1943	159	753	36	7	15s.
Lancashire ..	3953	2419	192	895	35	9	17s.—18s.
West Riding of Yorkshire ...	2-6-	2123	183	761	37	16	—
East Riding of Yorkshire ...	400	1914	165	736	36	6	16s.
North Riding of Yorkshire ...	354	1767	150	770	35	9	—
Durham	1024	2057	174	775	36	34	18s.—18s.
Northumberland	506	2019	209	825	40	33	18s.—21s.
Cumberland ..	266	1795	165	704	37	13	18s.
Westmorland ...	66	1432	141	612	39	4	—
Monmouthshire	275	1953	145	810	33	9	12s.
South Wales ...	9-5	1904	200	843	39	8	—
North Wales ..	456	1706	211	876	44	8	12s.—15s.

APPENDIX III.—*Fifteen Sanitary Districts with the least Phthisis Rate in their County. Geological Notes by Professor H. G. Seeley.*

Crude phthisis death-rate. 1861–70. Male.	1861–70. Fem.	1881–90. Male.	1881–90. Fem.	District.	—
140	177	111	1-2	Sheppey (Kent).	Sheppey in the south is marshy alluvium in the north, though London clay high, with a good slope to the south and some places have a capping of Bag sands.
207	220	126	128	Cuckfield (Sussex).	Mainly wealden clay but the northern part is so broken up with faults that areas sandstone are intermixed with clay As it is near the top of the Wealden clinal fold it is diversified and has none of the low character usual with clay
177	211	95	134	Hungerford (Berkshire).	Chalk with some London clay to the east.
186	239	97	104	Chipping Norton (Oxford).	Alternations of lias clay and lower oolitic sand and limestone It seems well drain and is a thriving manufacturing district.
155	166	127	87	Epping (Essex).	London clay with some sand and gravel on the higher ground, inhabited partly as suburb of London.
172	187	113	107	Mutford (Suffolk)	Lowestoft district, one-third alluvium, one-third boulder clay one-third sand and gravels.
171	224	106	161	Caxton (Cambridge)	Neocomian ferruginous sand with gault clay above and Kimmeridge clay below south and north.
1-9	234	103	125	Axminster (Devonshire).	On the coast south lias clay inland green sand, and trias sand.
170	183	125	154	Launceston (Cornwall).	Slate.
142	169	63	94	Chipping Sodbury (Gloucester).	Limestone sandstone and clay in parallel strips.
144	182	91	93	Cannock (Staffordshire)	Trias sandstone and coal shale on the border of the Black country
145	166	97	73	Stourbridge (Worcestershire).	
180	291	92	129	Nuneaton (Warwickshire).	Chiefly Permian and trias sandstone with a little coal.
137	233	82	72	Lutterworth (Leicestershire).	Lias clay and trias sandstone.
192	299	106	152	Basford (Nottinghamshire).	Mainly trias sandstone with a little magnesian limestone in the west.

In the healthier rural or less manufacturing counties phthisis mortality more closely coincides with the low mortality for all causes But frequent exceptions are seen in as many as one fifth of these counties—Suffolk, Cambridge, North Wales, South Wales, Surrey, Hampshire, and Cornwall—which while above the mean for phthisis rate are far below the mean in density of population (Map F) and death-rate Then the broad statement may fairly be made that occupational influence alone gives no explanation to account for this want of coincidence in either case

If the rate of declension in the counties be compared there is little or no difference between counties which are specially urban and those which are rural

FOOD

If we turn to another factor in phthisis—food—the map of phthisis mortality again affords slight indication that a difference in nutrition accounts for the difference in incidence of phthisis while not contradicting the idea But the map of liability to die from this kind of death instead of another (Map E) suggests at once that much of phthisis occurs in inverse proportion to the wages of the people, for it is wage above all things which attracts the population to the towns and with two exceptions—London and Northumberland—all the 11 counties with highest mortality in England have a proportion of deaths from phthisis which is below the mean

VENTILATION

These two counties, London and Northumberland, suggest the next factor—air These two with Durham and West Riding, are the counties with most overcrowding in England and it is upon that account largely that these four counties appeared above the mean mortality of England and Wales both for all causes and especially for phthisis When the age incidence of these counties is inspected it is seen that the maximum mortality is a decennium later than usual in men—not till from 45 to 55 years That this is due to overcrowding was shown in the chart It is remarkable that 13 counties only show this late maximum, of these, six are the only six counties whose overcrowding is above the mean for England (adding Warwick and Cumberland to those named), the other seven counties being Cornwall (showing the influence of mines), Middlesex and Essex (showing the influence of London), South Wales, Cheshire, and the small populations of Rutland and Westmorland

The influence of overcrowding is equally visible when the rate of declension in counties is compared Just as it was shown in the sanitary districts of London that a very high rate of overcrowding, over 30 per cent was sometimes accompanied with no declension of phthisis, so it is seen that the exceptionally overcrowded counties—Durham, 34 per cent, Northumberland, 38 per cent—have made very much less advance than any of the other counties of England, only about one half of the mean declension for England and Wales, when the crude rates of the Registrar General for 1861 to 1870 and 1881 to 1890 are compared

CLIMATE

Finally, noting the dryness of climate It is well known that drainage of the subsoil has had much influence in towns upon the declension of phthisis

Dampness, whether of soil or atmosphere, seems to be a special attribute of those counties which have a high phthisis rate contrasting with a low death rate from all causes I refer to Cambridge and Suffolk, Cornwall, North Wales, and South Wales Other agencies are present affecting nutrition in most marked degree in both North and South Wales, as has been mentioned, low wages are conspicuous in Cambridge and Suffolk, and mine ventilation, at later age groups, affects Cornwall It may be noted that Cornwall and Cumberland probably agree in being better supplied with food than some agricultural counties while at the early ages they show an exceptionally heavy mortality from phthisis This suggests that damp, like general nutrition, has a great effect upon the children and young adults Dampness of houses in nearly all rural districts is a factor the influence of which would extend over all those rural counties whose special liability to die from phthisis rather than from other causes has been associated above with a lower wage, Dr Plowright noted its influence in his local survey Full investigation is required to tell whether it be a less or more important factor Professor Seeley, of whom I inquired the superficial geology of 15 of the healthiest rural districts, informed me that nearly all were of a mixed character and many were not characterised by marked dryness of soil His notes are of such interest that they are appended (Appendix III)

It does not appear that dampness of soil or climate has prevented the affected counties having an equal share in the rate of declension

The local influences thus too briefly considered have existed in the counties for the past generation and the same difference has existed in the incidence of phthisis always subject to the general declension In time doubtless the county medical officers of health will supply fuller and more definite evidence The multitude of the data which it has been necessary to consider in attempting to gauge the causes of the declension of phthisis has obliged me to content myself with presenting but a summary of those factors which can best be measured These have been, I believe, the most important factors, but others of importance have been left unconsidered, some of which play a considerable part in causation, as alcohol, and others which one can only find to be of small account, as house infection

No attempt has been made to gauge increased efficacy of treatment of the disease

The condition of the lung seems to be everywhere influenced by those few well known evil influences which I have discussed and to respond by becoming infected with tubercle Just as clinical evidence shows the apex of the lung alone succumbing to an infection which, it must be supposed, attacks also other regions of the lung, so the evidence of the death returns would indicate weak lungs succumbing to an infection that must attack many more strong lungs without effect Further, the death returns show how vast are the opportunities of infection, the sparse populations dying from this disease in a greater proportion of deaths than the crowded populations, always excepting overcrowding

The figures do not tell how many of all the deaths from phthisis are under the fluctuating influences we have considered, but we may safely infer that the proportion is large and further that, great as the declension of phthisis has been, great it may continue Leprosy, which had poverty as its most prominent association, has vanished. Further advances in the prosperity of the population will go far to assist in the disappearance of phthisis from England

It has not been without much ready assistance from the officials at Somerset House, the Commissioners in Lunacy, Mr Shirley Murphy, and many medical officers of health, medical men in different parts of the country, and friends, that I have been able to collect the information upon which I have based my remarks, to all of whom I am under very great obligations

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EXETER DENTAL HOSPITAL—The nineteenth annual meeting of those interested in the Devon and Exeter Dental Hospital was held recently The report showed that 2902 cases had been treated during 1898, making a total of 94,805 since the opening of the institution

THE WATFORD POISONING CASE—On April 10th at the Metropolitan Asylum, Leavesden, near Watford Mr Broad, the coroner, resumed an inquest on the body of Caroline Ansell, an inmate, whose death on March 14th is alleged to have resulted from eating poisoned cake sent to her by post The jury found a verdict of "Wilful murder" against the sister, Mary Ann Ansell, the motive suggested for the alleged crime being to secure the sum insured on the dead girl's life

A CASE OF MYOSITIS OSSIFICANS PROGRESSIVA.

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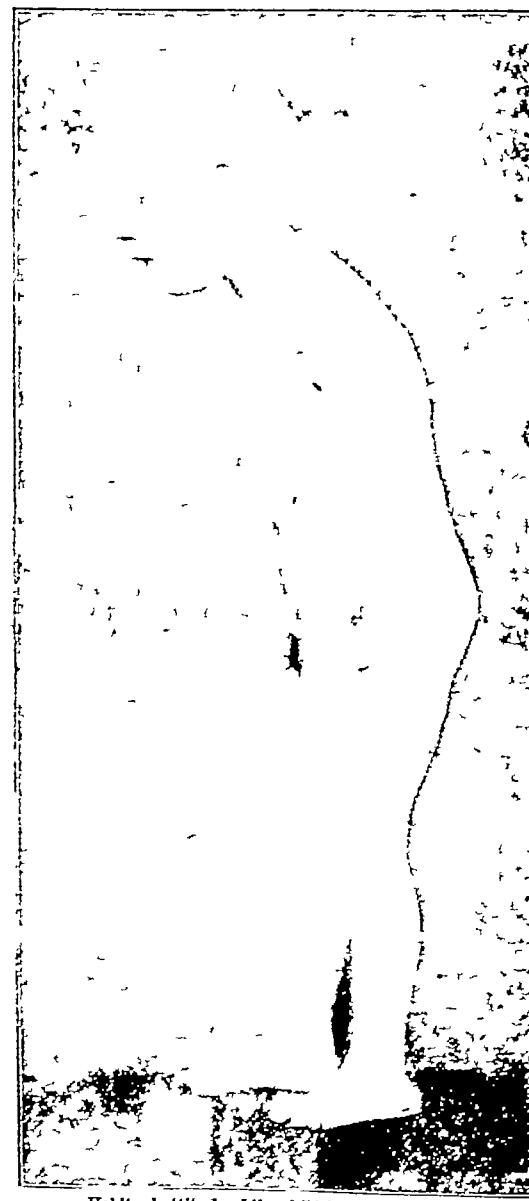
ASSISTANT PHYSICIAN TO KING'S COLLEGE HOSPITAL AND TO THE ROYAL FREE HOSPITAL;
AND
HARRY LOCKWOOD, M R.C S ENG,
SURGEON TO THE SHEFFIELD ROYAL HOSPITAL.

WE are induced to record the present case both by reason of the rarity of the affection described and also on account of its obscure pathology We have thought it well to give in some detail the chief matters round which controversy has ranged itself, such as the family history, the associated illnesses, and other points

The patient was a boy, aged six and a half years, who was admitted to King's College Hospital in February, 1899 For some two or three generations on either side there does not appear to have been any predisposition to rheumatism, to nervous affection, or to the so-called ossifying diathesis in any form The boy had two sisters who were both living and healthy His father and his mother were living and strong His grandfather on the paternal side was living and healthy, as was also his grandfather on the maternal side His paternal grandmother had died from chronic bronchitis and his maternal grandmother from non rheumatic heart disease His mother's grandfather and grandmother had both died in old age, the former from cancer of the tongue He was the eldest child and there had been no difficulty in his birth. The absence of the ungual phalanges of the third and fourth toes of the left foot was noted at birth, as was also the throw outwards of the great toe underneath the second toe on each foot He was a strong, healthy child until two and a half years of age when he had German measles, and while recovering from this he fell and bruised his right shoulder No history of swelling of the right shoulder was forthcoming but in the course of the same month as that of the accident he was under treatment at the Sheffield Children's Hospital for stiffness in the right shoulder which was not relieved. Presumably, then, the illness may be dated from January, 1895, when the child was two and a half years old. This seems to be just about the average age of onset in the recorded cases although Kummel records a case which began at 14 days of age and Kronecker one at 54 years of age. The relation of the onset to injury has been noticed in such a very large number of cases as to put Pinter's incredulity on the point out of court

The next record of the patient is in June, 1895, when he came under the care of Dr A. J Hall at the Royal Hospital, Sheffield, with the disease well developed. Dr Hall noted that the head was drawn to the right side, that the right sterno-mastoid was tense and contracted, and that there was a bruise between the right scapula and the spine There was also a distinct swelling in the right posterior axillary fold just in front of the outer edge of the scapula which was firm but ill-defined in outline. There was no tenderness over the swelling, but there was pain when the right arm was raised. This is the only suggestion we have been able to trace of a state of swelling prior to ossification such as has been described by Munchmeyer, Godlee, and others Munchmeyer recognises three distinct stages in the progress of the disease· (1) a proliferation of young cells in the interstitial tissue of the muscle which enlarges the muscle and its sheath; (2) that the strand becomes fibrous and that it contracts and hardens the fleshy mass, (3) that ossification takes place at certain points of the muscle, and (4) true ossification. For the next year the patient was lost sight of until, in June, 1896, he came under the notice of Mr Lockwood who describes his condition as follows[1] "You will notice his peculiar bend forward of the body and head and the rigidity of his spine and flexure He cannot raise his shoulders at all and cannot even raise his hands to his mouth. When he wants to put any food into his mouth he has to place it on a chair and take it into his mouth—as his mother puts it, 'like a dog' He stands with his hands crossed in front of him, and his hands are never quiet for more than a second or two The right pectoralis major is ossified and fixed to the sternum, his left one is simply fixed At the back you will see a large number of hard masses in the dorsal region which have deflected the spinal column These hard masses are presumably formed by the ossification of the latissimus dorsi and trapezius muscles You will notice also that the terminal phalanges of the third and fourth toes of the left foot are absent, and deformity of the great toes which are turned outwards and under the second toe, producing a condition of hallux valgus" Eight months later (on Feb 6th, 1897) Mr Lockwood added "I have examined the boy again and find that the ossifications of the back have increased largely in size Both shoulders and the right elbow are quite fixed The muscles of the thighs feel much harder and tenser than normal and the orbicularis palpebrarum has an ossification in its lower part At times the boy experiences great difficulty in breathing and has an intense thirst, otherwise his general health is good.'

FIG 1



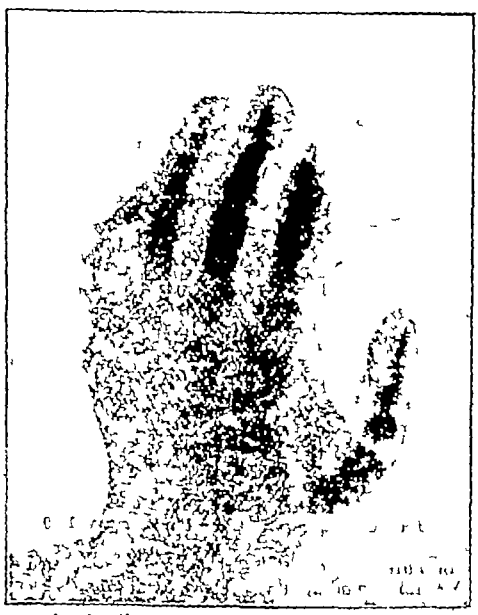
Habitual attitude of the child in February 1899

The habitual attitude of the child in February, 1899, is as shown in Fig 1 He has grown, so to speak, in the only

[1] Quarterly Medical Journal, April 1897

direction which is permitted by the bony plates which immoveably fix his vertebral column He stands with his head thrown forward and his back bent like an old man His upper arms are set fast at his sides and the hands are either clasped in front of him or hanging loosely pronated over his thighs The ceaseless movements of his fingers are in marked contrast to the general listlessness and fixity of his attitude The head besides being thrown forward is slightly drawn down towards the right shoulder with the face inclined to the left *The rigidity of the muscles at the back of the* neck scarcely permits any nodding movement of the head, and rotation from the mid line is limited to an inch or so in either direction The skull is distinctly more bossy than is usual, more particularly in the frontal and occipital regions His eyes are perfectly normal—we mention this because Bokay noted the affection in the ocular muscles, and Billroth and Zollinger discovered a calcareous plate in the choroid Dentition is normal for his age and there is no abnormality to be found in the ears, the nose, or the larynx The nape of the neck is rigid and contracted and a small transverse bar of bone can be felt beneath the skin apparently in the substance of the trapezius The comparatively free movement of this fragment of bone shows that at any rate not all of the bony growths are in anatomical connexion with pre-existing bone Other than this we can find no development of bone either in the sterno-mastoids or in the muscles of the cervical spine, and the fixity of the head seems to be due to a rigid contracture of these muscles—a condition which it would seem is antecedent to ossification In the front of the chest one may see at times a constant succession of fibrillary twitchings coursing over the clavicular portions of the pectoralis major and of the deltoid as though their fibres were subjected to some form of irritation The humeral attachments of the pectoralis major are tense and contracted on each side, and the free margin of the anterior axillary fold feels almost like bone, but so far as we can ascertain the plate of bone which can be felt in front of the shoulder is confined to the latissimus dorsi and perhaps the teres major The condition is identical on either side of the body By this means the upper arms are glued immoveably to the sides, they cannot be abducted at all and the attempt to do so gives the child pain The fixed position of the humerus is one of slight inward rotation We have examined the bones of the upper arms and forearms

FIG 2



Skiagram showing the extreme shortness of the bones of the thumb

throughout by means of skiagrams and find no abnormality of any kind except some undue prominence of the anterior bicipital ridges on either side This tendency to overgrowth of normal prominences and processes of bone is a marked feature of the case The new bone is not developed at random but almost without exception in relation to some normal protuberance which has taken on abnormal growth. In the hands there is a condition of microdactyly of each thumb, the thumbs are very short and reach only just beyond the metacarpo phalangeal joint of the index finger on either side, and they are also turned considerably inward. The shortness is not due to absence of a phalanx, as may be seen in the skiagram (Fig 2), but to shortness of all the bones of the thumb, particularly the metacarpal bone The synostosis of the first and second phalanges *of the thumb which is present in this case has been* previously noted by Helferich The full respiratory expansion of the chest ranges over less than one inch, but

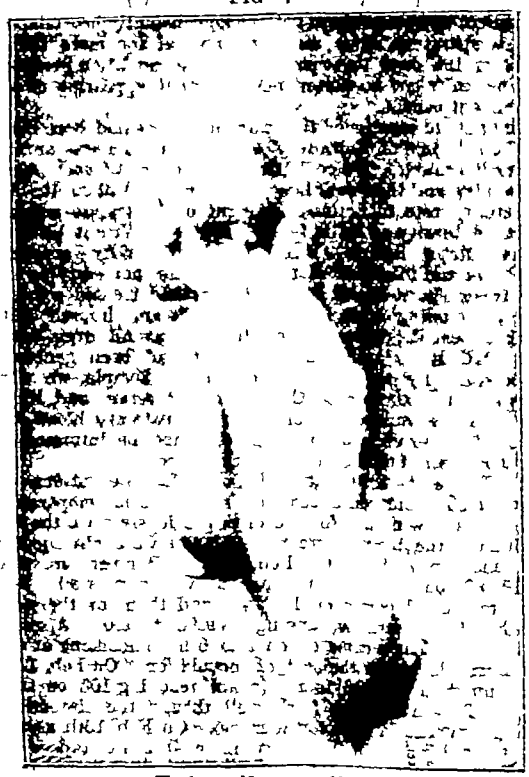
FIG 3

Back view of the patient showing the bony ridges.

beyond the feeble entry of air we have not been able to detect any fault in the lungs In the heart there is disease of the mitral valve with regurgitation which may, perhaps, be taken as an abarticular evidence of rheumatism. Respiration is almost exclusively abdominal The abdominal viscera and the muscles of the abdominal wall appear to be perfectly healthy The urine also is normal Turning to the back there is no movement at all in any portion of the dorsal or lumbar spine There is one unbroken backward curve of the spine and in this position the spinal column is permanently locked by the succession of bony splints and possibly also by synostosis of the vertebræ Small bosses of bone can be felt and seen on the spinous processes of the second and third dorsal vertebræ and from these low ridges of bone project into the retro vertebral muscles on either side These ridges are not visible but can be clearly felt The fourth, fifth, and sixth dorsal vertebræ do not seem to be affected but there is a sharply angular exostosis in connexion with the spine of the seventh dorsal vertebra over which the skin is thin and threatens to perforate. At the site of the eighth dorsal spine there is a large process of bone stretching to the right and left of the mid line and extending below on either side in a bony ridge which runs apparently in the substance of the erector spinæ muscle down to the iliac crest and terminates on each side in a bony protuberance on the crest of the ilium close to the spine.

The ridge in the left erector spinæ is about one and a half inches in breadth throughout its whole extent, but that on the right broadens considerably from above downwards and

FIG 4



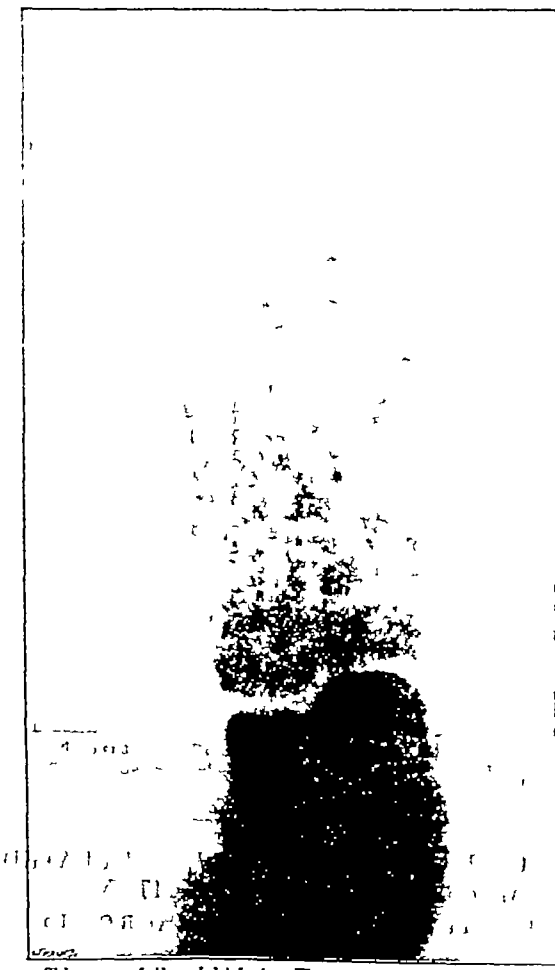
The bony ridges seen sideways.

FIG 5

Another view of the bony ridges.

is as much as two and a half inches in breadth where it reaches the crest of the ilium These ridges are very well seen in Figs 3, 4, and 5. Returning to the level of the eighth dorsal vertebra, there is also on either side of the spine a ridge of bone running upwards and outwards into the muscles of the back All these ridges together form a rough semblance of the capital letter H with the cross stroke at the level of the eighth dorsal vertebra (see Fig 5) These upper limbs seem to lie in the substance of that portion of the trapezius muscle which is attached to the spine of the scapula They appear to cross the scapula midway between its spine and the inferior angle and just beyond the outer border of the scapula they become merged in the ossification of the latissimus dorsi The condition so far is identical on the two sides, but on the left side an additional offshoot is given off from the left upper ridge downwards for some two and a half inches along the vertebral border of the scapula We have not detected any abnormality of the pelvis, when the child is sitting,

FIG 6



Skiagram of the right foot The metacarpal bone of the hallux is synostosed with the first phalanx. The second phalanx is thrown outwards.

a symmetrical pair of bony tubercles stand out prominently either from the last piece of the sacrum or from the first piece of the coccyx Skiagrams failed to show any abnormality of the bones or muscles of the thighs or legs, but a condition which has several times been described as hallux valgus is present in both of the great toes It has been so often described in the recorded cases of myositis ossificans progressiva that the deformity must be regarded as part and parcel of the disease The skiagrams (Fig 6 and Fig 7) which we have obtained show that at any rate in this case the condition is quite distinct from hallux valgus The condition in each great toe is synostosis of the metacarpal bone and the first phalanx and the second phalanx is thrown outward beneath the second toe It is easy to see how this throw outward of the last phalanx serves to correct

direction which is permitted by the bony plates which immoveably fix his vertebral column He stands with his head thrown forward and his back bent like an old man His upper arms are set fast at his sides and the hands are either clasped in front of him or hanging loosely pronated over his thighs The ceaseless movements of his fingers are in marked contrast to the general listlessness and fixity of his attitude The head besides being thrown forward is slightly drawn down towards the right shoulder with the face inclined to the left The rigidity of the muscles at the back of the neck scarcely permits any nodding movement of the head, and rotation from the mid line is limited to an inch or so in either direction The skull is distinctly more bossy than is usual, more particularly in the frontal and occipital regions His eyes are perfectly normal—we mention this because Bokay noted the affection in the ocular muscles, and Billroth and Zollinger discovered a calcareous plate in the choroid Dentition is normal for his age and there is no abnormality to be found in the ears, the nose, or the larynx The nape of the neck is rigid and contracted and a small transverse bar of bone can be felt beneath the skin apparently in the substance of the trapezius The comparatively free movement of this fragment of bone shows that at any rate not all of the bony growths are in anatomical connexion with pre-existing bone Other than this we can find no development of bone either in the sterno-mastoids or in the muscles of the cervical spine, and the fixity of the head seems to be due to a rigid contracture of these muscles—a condition which it would seem is antecedent to ossification In the front of the chest one may see at times a constant succession of fibrillary twitchings coursing over the clavicular portions of the pectoralis major and of the deltoid as though their fibres were subjected to some form of irritation The humeral attachments of the pectoralis major are tense and contracted on each side, and the free margin of the anterior axillary fold feels almost like bone, but so far as we can ascertain the plate of bone which can be felt in front of the shoulder is confined to the latissimus dorsi and perhaps the teres major The condition is identical on either side of the body By this means the upper arms are glued immoveably to the sides, they cannot be abducted at all and the attempt to do so gives the child pain The fixed position of the humerus is one of slight inward rotation We have examined the bones of the upper arms and forearms

FIG 2

Skiagram showing the extreme shortness of the bones of the thumb.

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A CASE OF RUPTURED TUBAL PREGNANCY,

INFECTION, CŒLIOTOMY, LARGE INJECTIONS OF SALINE SOLUTION WITH BRANDY, RECOVERY[1]

BY C HAMILTON WHITEFORD, M R C S ENG, L R C P LOND,

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I SAW the patient, a married woman, aged 24 years, at Dr R H Clay's request on Feb 14th, 1899 The following was the history of the case The patient had been married for seven years She had had two children, six and five years ago There had been no miscarriages She had not missed a period for five years till Jan 15th last, when the period then due did not appear On Feb 3rd there had been "pain in the back and both passages" Retention of urine had been relieved by catheter Pain had been again experienced on the 6th and there was a little blood per vaginam There had been "straining in the back passage" on the 10th, with diarrhœa and a few clots per vaginam On the 13th there had been diarrhœa and pains like those of labour When I saw the patient on the morning of the 14th I ascertained that except for the amenorrhœa she had no reason to think herself pregnant She had had leucorrhœa before and after marriage, but had had no abdominal pain during the last five years The abdomen was slightly distended and tender, with an indistinct sense of resistance above the pubes It was resonant except in the flanks, where dulness was most marked on the left side The dulness was not affected by change of position Per vaginam the uterus was found to be depressed and close behind the pubes The cervical canal was closed In Douglas's pouch was a smooth, very tender mass resembling an ovary, the rest of the pelvis felt full and boggy Per rectum the same boggy mass was felt The upper rectum felt constricted The lips were somewhat anæmic The pulse was 110 and the temperature was 101° F Since 5 o'clock on the previous evening the patient had taken 80 minims of solution of morphia, she had been free from pain and had slept well I diagnosed ruptured tubal pregnancy with coagulation of effused blood When seen again at 9 P M it was found that in spite of the administration of 40 minims of solution of morphia there was great pain in the lower abdomen which was much more distended and which had a dull area above the pubes corresponding with a distended bladder The temperature was 103° and the pulse was 124 The face presented a drawn appearance and the breath had an odour suggestive of grave sepsis I considered that the blood in the abdomen was becoming infected and that possibly a fresh hæmorrhage was taking place, so, with Dr Clay's concurrence I decided to operate without delay

At 1 A M on Feb 15th chloroform was administered by Dr Bushnell The abdomen was scrubbed with soap-and water and the pubes was shaved. 15 ounces of urine were withdrawn by catheter Assisted by Dr Pethybridge I opened the abdomen by a six inch incision through the right rectus The omentum and small intestines were partly adherent to the pelvic contents On separating these handfuls of dark clot and fluid blood appeared The uterine vessels were at once clamped at each cornu After emptying the pelvis of blood the right Fallopian tube was found to be ruptured at its centre leaving a ragged cavity The right ovarian vessels were tied at the pelvic brim and the uterine vessels at the uterine cornu I had intended cutting away the tube and ovary and then uniting the two layers of broad ligament by a continuous suture, but as by this time the radial pulse had vanished I transfixed the broad ligament and tied off with the usual interlocking suture On removing the clamp from the left uterine vessels some oozing occurred which was controlled by a double ligature not interlocked Several large clots were removed from the right loin, the left flank appeared to be empty The omentum had several clots incorporated with it, as had also the rectum and uterus These clots were so adherent that they were left Some difficulty was experienced in replacing the distended intestines Mass sutures were used to close the abdomen Before tying the last suture five and a half pints of hot saline solution were poured into the abdomen through a funnel and tube directed under the liver This revived the patient slightly but she was still pulseless at the wrist So far the operation had lasted an hour and five minutes The chloroform administration was now stopped On looking for a superficial vein into which to inject saline solution none was visible The venæ comites of the right brachial were then exposed in the middle of the right arm They were so small that it was impossible to introduce a cannula The incision was then prolonged up to the fold of the axilla where the veins united and into this vein eight and a half pints of hot saline solution with an ounce of brandy were injected Chromic catgut ligatures were used throughout The patient who from excess of fluid was very bloated and blanched was warm and had a small radial pulse of 140 Just before being put into bed she had several rigors the result of the saline injections She had a fair night with no sickness, sleeping fairly and passing a pint of urine When seen at 10 A M her right forearm was very swollen and her face suggested severe nephritis, being very white and œdematous The bowels had acted slightly On the 16th she had taken small quantities of milk, brandy, and soda water The bowels were acting freely She had passed four pints of urine in the 24 hours following the operation From the 17th onwards the patient picked up rapidly She took food freely and the bowels and kidneys acted well Some pain in the right iliac region due to the formation of an abscess which opened through the abdominal incision on the sixth day was relieved by occasional 20 minim doses of solution of morphia The temperature, which varied between 99° and 102°, reached normal on the tenth day The pulse after the first week rapidly declined and on the twenty fifth day it had come down to 78

When I saw the patient on the evening of the first day (Feb 14th) she was evidently becoming acutely septic, as evidenced by the distended and painful abdomen, an increased pulse-rate in spite of more morphia, a temperature of 103°, diarrhœa, and the peculiar odour of breath so often associated with grave sepsis Filling the abdomen with hot saline solution converts the peritoneal cavity for the time being into an internal hot-water bag and may in addition help to prevent adhesions It also prevents any large secretion by the peritoneum which in one case appeared to me to be the cause of fatal collapse four hours after a laparotomy for a ruptured tubal pregnancy The eight and a half pints of saline solution with brandy injected intravenously, partly compensated for the fluid lost by hæmorrhage and diarrhœa and gave the kidneys a chance of eliminating the septic material which had been absorbed In a similar case of sepsis not complicated by hæmorrhage I intend, if by injecting a large amount of saline solution intravenously I can get a pulse of good volume, to relieve the patient of blood to the amount of a pint or more, with the object of directly reducing the poison present in the circulation Everything used at the operation was boiled immediately before being used, with boiled saline solution for the instruments, &c Antiseptics were not used I consider it illogical and useless to apply antiseptic solutions in the strengths usually employed to a wound which is considered capable of union by first intention If there had been time I should have tried to disinfect the skin with ether followed by a compress of a strong antiseptic Normal saline solution does least damage to cut tissues and corresponds fairly well to the lymph which circulates in the part As the five-inch incision in the arm healed by first intention the abscess in the abdominal incision was probably caused by infection from within and not from without On examining the ruptured tube the fimbriated end was found to be blocked by a partly organised and adherent blood-clot, the sequence of events probably being partial tubal abortion, blocking of the abdominal ostium by clot, increased tension within the tube, and rupture into the cavity of the peritoneum.

The interval of five years since the last pregnancy is explained by the husband's admission of the use of artificial means to prevent conception It would be interesting to know if the above explanation is applicable to other cases of tubal pregnancy which have been recorded as following a long period of sterility I attribute recovery to the large

[1] A paper read before the Plymouth Medical Society on March 18th 1899

the false position in which the first phalanx is fixed, and we would suggest that in the previously recorded cases this may have been the simple explanation of a seemingly mysterious deformity In the left foot the terminal phalanges of the third and fourth toes are both absent

FIG 7

Skiagram of the left foot. The same conditions exist as in the right foot, but in addition the terminal phalanges of the last two toes are wanting

A CASE OF MALTA FEVER TREATED WITH MALTA FEVER ANTITOXIN

BY E D FITZGERALD, M R C S ENG, L R C P LOND,

AND

J HOGGAN EWART, M D EDIN

AN officer serving with the Mediterranean squadron at Malta contracted Malta fever and went on the sick list on August 11th, 1898 The treatment was not stated but he returned to duty on Sept 3rd On Sept 23rd he was again placed on the sick list, when his temperature was 102° F For a week previously he had felt ill, with severe pains across the eyes and at the back of the head On Oct 7th he went into Malta Hospital The temperature was very variable, the highest being 103 8° He had rheumatic pains and severe headaches On Oct 22nd he was invalided home and he came under our care at Folkestone on Oct 31st

When first seen the patient was anæmic in appearance, the heart sounds were muffled and weak, and the temperature was intermittent, subnormal in the morning and from 100° to 101° at night. He complained of rheumatic pains, his tongue was furred, and his liver was slightly enlarged. The patient was put to bed, was placed on a milk diet, and was treated with phenacetin and calomel He improved considerably in a few days and was put on iron and quinine and later on arsenic Although he improved temporarily under treatment and was able to get out he constantly had relapses. His temperature never remained normal for more than a week or ten days together, his anæmic condition persisted, and he really got no better, no treatment appearing of any permanent benefit

The patient mentioned that a friend of his had been cured by the injection of Malta fever antitoxin and he was anxious to try it himself We could find no account of such serum on inquiry and the Naval Board knew nothing about it We therefore wrote to Professor Wright of Netley, an acknowledged authority on Malta fever Professor Wright being in India, Major Semple, R A.M C, very kindly answered our letter and informed us that they were then carrying out this treatment at Netley and that they had treated some 50 cases, including both Professor Wright and himself, with marked benefit, whereas they found that all drug treatment failed the antitoxin treatment had been generally successful By the courtesy of Major Semple we were supplied with 60 cubic centimetres of the serum, and Major Semple also examined a specimen of the patient's blood, but the Malta fever germ was not detected and he informed us that he usually failed to find it in the blood

On Jan 31st, 1899, with all the usual precautions we injected 20 cubic centimetres of serum The temperature had been below normal for five days previously On the following day the temperature was 99° and we again injected 20 cubic centimetres On Feb 2nd the temperature rose to 101 6°, but otherwise the patient was very well The temperature fell again on Feb 4th and then for the next few days it was variable, ranging from 98° to 100° A smart attack of urticaria came on on Feb 6th commencing at the abdomen which was the seat of inoculation On Feb 12th the temperature began to rise again, reaching 102° on that night The patient was fairly well, though the discomfort from the urticaria was considerable On Feb 13th as the temperature was still high, we injected a third dose of 20 cubic centimetres of the serum This was followed by a serious reaction, the temperature rising to 104 6° on Feb 15th and the patient looking and feeling very ill with urticaria all over his body The joints were swollen and painful, the breathing was quick, there was slight cough, and the expectoration was tinged. It seemed that he had a general urticaria, both externally and internally, causing exudation from the various serous membranes These grave symptoms gradually subsided, the temperature slowly falling at the same time, and on Feb 21st it was normal and the patient was convalescent. From that day he rapidly picked up strength The temperature became subnormal and remained so for some two or three weeks, but day by day he felt better and he has not had the slightest return of the Malta fever symptoms His temperature has not been above normal for over a month—by far the longest period since the commencement of the illness during which it has remained so The patient has now gone away, but he has written to us to say that he feels perfectly well and strong again We examined his blood twice—once on Jan 30th, the day before the first injection, when the hæmoglobin was 120 and the corpuscles were 7 3, and for the second time on Feb 2nd, after the second injection, when the hæmoglobin was 105 and the corpuscles were 6 93

In conclusion, we must express our gratitude to Major Semple for supplying us with the serum and for information concerning its use

Folkestone.

NOTIFICATION OF MEASLES —At the meeting of the Bodmin Town Council, held on April 6th, it was resolved, on the motion of the mayor, that the Infectious Diseases (Notification) Act should apply to measles

NEW WORKHOUSE INFIRMARY —The new workhouse infirmary for the Falmouth Union was formally opened by the chairman of the board of guardians (Mr T Webber) in the presence of a large assembly of townspeople The cost of the building amounted to £2100 and the Local Government Board Inspector (Mr H Preston Thomas) who was present at the ceremony congratulated the guardians upon the completion of such an excellent hospital

opalescent thin mucoid fluid which readily rendered starch paste soluble even at room temperature and converted it into maltose and dextrin It also faintly gave the reaction for sulphocyanide of potassium The salivation went on during sleep, it was always less at the end of the gastric crises The patient did not swallow much saliva when sick Crises took place after admission every three days from Oct 14th till Nov 8th There was then an interval till Nov 18th to 20th and after this the patient had a period of immunity lasting from Nov 20th to Dec 23rd (four and a half weeks) There was then another short attack which was repeated on Jan 10th and Feb 3rd, 1899, and so on The general features of the crises were the same as before admission Blood occurred frequently in the vomited matter sometimes at the beginning and sometimes at the end of the attack On several occasions it was very plentiful, amounting to about a pint In colour it did not present the ordinary coffee ground appearance, but was generally of a deep-red or plum colour Apart from the crises the patient had no indigestion and physical examination revealed no abnormality in the stomach When the crises came on the abdomen seemed to bulge and after they ceased it subsided again The bowels at these times were usually costive and irregular During the attacks the urine became neutral or alkaline and tended to deposit phosphates

While the patient was in hospital I made a number of careful examinations of the contents of the stomach, the results of some of which will be found in the accompanying tables

Nothing in Table I suggests the least defect in digestive power As a matter of fact digestion always appeared to proceed evenly and rapidly, and, as noted above, on two occasions the stomach was found to be quite empty at from two to two and a half hours after a plentiful test dinner On one occasion the total acidity was somewhat high (0 39 per cent) without any obvious cause (Table II)

In Tables III and IV are shown the results of some examinations made when the attacks were present It will be seen from Table III that on no occasion did the gastric contents exhibit any hyperacidity, the highest figure obtained being 0 3 per cent which included free and combined HCl, a trace of lactic acid, and the acid salts Free HCl itself was generally absent There is no indication that the total acidity diminished as the crises continued, as will be gathered from analyses 2, 3, 5, and 6, where on consecutive days the acidity was found to have slightly increased though it never rose above normal Traces of lactic acid were present on three occasions and as a rule peptones were found in the fluid On all occasions save one blood formed a large part of the vomited matter, on several occasions it was very copious and was generally deep-red or plum-coloured in hue

TABLE I —*Examination of the Contents of the Stomach removed by Stomach tube during Intervals of Freedom from the Attacks In all cases the lavage was performed after a test dinner*

—	No 1 One and a half hours after test meal.	No 2. Two and a half hours after test meal.	No 3 Two hours after test meal.*	No 4 Two hours after test meal.
Reaction	Acid to litmus and to Congo red.	Some amount of fluid, neutral to litmus and negative to Congo red.	—	Acid to litmus and to Congo red
Total acidity	0·292 per cent.	—	—	0·39 per cent
Free HCl ...	Present (scanty)	Contained no HCl or peptones or sugar	—	Present (scanty)
Lactic acid ...	Faint trace	—	—	Absent
Volatile organic acids ..	Absent	—	—	Absent.
Peptones ...	Present.	Pepsin present and active in acid solution.	—	Present
Sugar ...	"	—	—	
Starch ..		—	—	
Blood	Absent.	—	—	Absent
Bile		—	—	
Pepsin	Present and active	—	—	Present and active.

* Stomach found to be perfectly empty

TABLE II —*Detailed Analysis of Total Acidity on Two Occasions during Intervals between the Attacks*

1 Total acidity = 0 292 per cent.

0·216 = combined HCl + trace of lactic acid.
0·022 = free HCl.
0·054 = acid salts.
0·292

2. Total acidity = 0·39 per cent.

0·253 = combined HCl.
0·045 = free HCl.
0·092 = acid salts.
0·390

No organic acids were present.

TABLE IV —*Detailed Analyses of Total Acidity during the Crises*

1 Total acidity = 0 109 per cent

0·036 = combined HCl.
0·073 = acid salts.
0 109

There was no free HCl, volatile or lactic acid.

2 Total acidity = 0·233 per cent

0·124 = combined HCl + trace of lactic acid.
0 109 = acid salts.
0·233

There was no free HCl.

3 Total acidity = 0·219 per cent.

0·149 = combined HCl + trace of organic acid.
0·070 = acid salts.
0·219

There was no free HCl

4. Total acidity = 0 215 per cent

0 146 = combined HCl.
0·069 = acid salts.
0·215

There was no free HCl or organic salts.

These detailed analyses indicate that on no occasion was there any hyperacidity and particularly no hyperchlorhydria the highest figure for combined HCl being 0 149 per cent, which included also a trace of organic acid The greater part of the total acidity was composed of this combined acid, the remainder being due mainly to acid salts

The conclusions which we are entitled to draw from the study of this case are (1) that during the crises the stomach secreted a large quantity of digestive fluid, inferior

TABLE III —*General Analyses of Fluid Rejected during the Gastric Crises*

—	No 1 —Oct. 17th.	No. 2.—Nov 14th.	No 3.—Nov 15th.	No 4 —Nov 22nd.	No. 5.—Dec. 23rd.	No 6.—Dec. 24th
Reaction	Acid to litmus, faintly to Congo red.	Acid to litmus negative to Congo red.	Acid to litmus and to Congo red.	Acid to litmus, faintly to Congo red	Faintly acid to litmus, negative to Congo red.	Acid to litmus faintly to Congo red
Total acidity ..	0 30 per cent.	0·211 per cent.	0·233 per cent	0·262 per cent.	0 109 per cent.	0·233 per cent
Free HCl	Present (scanty).	Absent	Present (scanty).	Absent.	Absent	Absent
Lactic acid ..	Trace		Absent.	Traces		Trace.
Volatile organic acid	Absent.			(?)		Absent
Peptones ..	Present	Present.	Present	Present		Present.
Sugar ...				"	Traces	
Starch ...		Absent.	"	Traces	Absent.	Absent.
Blood ..		Abundant.		Absent.	Abundant	Abundant.
Bile... ...		Present.			Present.	Present.
Pepsin	Present and active.	Present and active	Present and active.	Inactive	—	—

amount of fluid injected—one and three-quarter gallons in all—which in the first place relieved shock and afterwards enabled the emunctories, especially the kidneys, to dispose of the poison, and also to the very able assistance which enabled me to complete the operation in just over the hour

Plymouth

THE CONTENTS OF THE STOMACH IN THE GASTRIC CRISES OF LOCOMOTOR ATAXIA

A CLINICAL AND CHEMICAL STUDY

BY CARSTAIRS C DOUGLAS, M D, B Sc EDIN

GASTRIC crises hold a prominent position among the visceral symptoms of locomotor ataxia and no one observing a patient suffering from them when accompanied by much vomiting can fail to be struck with the enormous quantity of fluid which is often rejected, even when the patient is taking little by the mouth As a rule, first of all the stomach is emptied of what food it contains, then there is vomiting of a clear liquid which later may be stained with bile or occasionally with blood Marie[1] says "There is vomiting, at first of food, but afterwards exclusively of slimy liquid or perhaps of a clear liquid mucous in character and more or less abundant At times the vomited matter is coloured by bile and more rarely by blood, it may quite exceptionally present the appearance of coffee grounds" With this general description that by Gowers agrees closely He states that the vomiting is at first of food and then of clear liquid which may be very abundant, ultimately bile is vomited and sometimes blood As regards detailed chemical examination of the vomited fluid there are on the whole but few reports, especially by English workers Sahli[2] some years ago stated that he had found excessive acidity of the gastric juice in this condition, but his analysis is unreliable as he made no exact quantitative estimation but merely relied on the intensity of the colour reaction as judged by the eye Marie quotes Rosenthal (1886) who found 0 3 per cent of HCl during the first days of the crisis and 0 10 per cent during the latter days, so that taking Richet's figure of 0 174 per cent as the normal, Rosenthal's figures show an increase in at least part of the attack The same was found by Simonin of Lyons (1886) Hoffmann in one of his patients found the gastric juice to be secreted in excess and to contain temporarily an excess of acid The quantity of HCl varied, often amounting to twice the normal quantity and rarely to less than the ordinary amount, and this only when owing to the abundance of the matter vomited the acid was somewhat largely diluted The only other point in this connexion to which reference is made by Marie is that in some cases small and varying amounts of lactic acid have been found Grasset[3] gives no details regarding the composition of the fluid, while Möbius[4] considers hyperacidity to be the exception in these cases and that the amount of acid is usually small

In a recent paper Michell Clarke[5] gives a good account of the stomach contents in a patient suffering from early tabes both between and during the crises The chief points as regards the chemistry are 1 In the intervals gastric digestion was rapidly performed and there was excess of HCl during the process (sometimes 0 4 per cent), whereas in the intervals between meals there was no evidence of secretion of HCl 2 During the whole duration of the gastric crises free HCl was absent from the stomach contents altogether while lactic acid was abundantly present In his analyses, however, no exact quantitative estimation of the different acids was made, the result being simply deduced from the amount of dilution which the fluids would stand while still exhibiting the colour reaction for the given acid In Dr Michell Clarke's case, as in the one which I am about to describe, there was marked hæmatemesis. In drawing any conclusions as to the presence of hyperacidity it must be remembered that the amount of acid secreted may vary, according to Verhaagen,[6] considerably even in health He found that there might be variations of one per mille, 1 5 per mille, and even two per mille, the acidity from two to two and a half hours after a test meal ranging from 3 to 4 8 per mille As regards lactic acid our latest knowledge of the gastric chemistry shows that it may occur in the fluid rejected in locomotor ataxia as in any other condition provided the stomach is emptied within an hour of eating and provided the last meal contained at least some carbohydrate Here it is formed as a result of bacterial action upon maltose taking place within the stomach This formation of lactic acid, which is quite physiological, ceases with the secretion of HCl and the lactic acid appears to be absorbed—at all events, it disappears from the stomach Various observers, however, have found, as I myself did, that lactic acid may be present during gastric crises hours after food has been ingested and subsequently vomited In the absence of dilatation of the stomach it is difficult to explain this, as recent observations point to the fact that when HCl is not secreted lactic acid does not take its place[7]

Having recently had the opportunity, through the kindness of Dr James Finlayson, to whom I desire to express my obligation, of studying the gastric crises in a case of early tabes where much hæmatemesis occurred I made a number of analyses of the stomach contents which I shall give in detail after a short account of the general features of the case

A man, aged 27 years, was admitted to the Western Infirmary, Glasgow, on Oct 14th, 1898, under the care of Dr Finlayson, complaining of sickness and vomiting and weakness of the legs The history of the patient's illness is taken in part from the ward journal Eighteen months previously he had noticed some weakness of the legs and unsteadiness on going downstairs or when he was in the dark Six months later girdle pain was experienced, but only for a fortnight At the same time attacks of vomiting began When the attacks were about to come on he had a feeling of nausea and uneasiness in the epigastric region, also great restlessness, so that he always tossed about in bed When vomiting began he first rejected any food that was in the stomach and as emesis proceeded he brought up mucus mixed with blood and bile The vomiting had no special relation to food either as regards the nature of the latter or the time of ingestion The attacks occurred at first every fortnight but latterly every two or three days and might last from one hour to a couple of days Eructations occasionally occurred before the attacks but as a rule the latter began suddenly For nine months he had had some bladder trouble and a tendency to constipation As regards his previous health, he had had gonorrhœa but not syphilis, nor was there any history of any stomach disturbance or of any gastric symptoms in the past He was temperate in the use of alcohol As regards his state on admission, the patient was pale, ricketty, and undersized, but fairly well nourished His weight was 7 st 7 lb As to his nervous system it may be briefly stated that there was some impairment of the tactile and temperature sense in the toes and in an area extending from the umbilicus to the fifth rib Romberg's sign was well marked, the superficial reflexes were present and were normal, the patellar reflexes were absent The pupils were equal and medium in size, the Argyll Robertson phenomenon was present, ptosis existed and was most marked on the left side, the fundus was normal Examination of the blood between the attacks gave 5,500,000 red cells and 9000 leucocytes per cubic millimetre, 80 per cent of hæmoglobin, and a specific gravity of 1060 The urine was clear, amber-coloured, and acid, and its specific gravity was 1026, no albumin, sugar, blood, bile, or albumoses were present, occasionally it was neutral or alkaline even apart from the attacks, and it then showed a deposit of pus and ammonio-magnesium phosphate As regards the alimentary system the patient after admission exhibited marked ptyalism, sometimes rejecting from a pint to a pint and a half of colourless, slightly

[1] Lectures on Diseases of the Spinal Cord, 1892, p. 266.

[2] Ueber das Vorkommen abnormer Menge freier Salzsäure bei den Gastrischen Krisen eines Tabetikers Correspondenzblatt für Schweizerische Aerzte 1885 No. xv S 105.

[3] Traité pratique des Maladies du Système Nerveux, Paris, 1894 quatrième édition p 513.

[4] Twentieth Century Practice of Medicine, 1897, vol. xi. p. 837

[5] A Contribution to the Clinical Study of the Gastric Juice, Brit. Med Jour, vol. ii, 1898, p. 1863.

[6] La Physiologie et Pathologie de la Sécretion Gastrique Paris, 1898, p 9

[7] Schäfer: Text book of Physiology vol. i 1898, p. 358.

again acted as chloroformist The administration commenced at—

H.	M.	S.	
9	35	26	Holding breath and irregular blowing
9	36	5	Regular breathing
9	36	30	Chloroform added, two breaths of air taken
9	37	12	The needle was inserted
9	37	50	Pus was flowing, half an ounce was removed
9	38	15	The needle was withdrawn
9	38	56	The patient walked to bed

The total time taken up by the operation was three minutes and 30 seconds and the total amount of chloroform employed was two drachms

The three operations were performed under partial anæsthesia with chloroform—merely giving the anæsthetic until the patient was unconscious—in 14 minutes and 56 seconds There was no hurry about any of the cases, which were brought in in the course of the ordinary morning's work The advantages of the partial administration are that it saves a lot of time and saves chloroform, that there is no sickness afterwards and that there is no possibility of danger provided that the chloroform is given with the same care as regards the respiration as when complete anæsthesia is produced Sometimes there is a little struggling, but if this is found to be inconvenient the patient can be "put over" or the administration can be stopped and consciousness can be restored

Afzulgunj Hospital, Hyderabad, Deccan

A CASE OF ADENITIS IN AN INFANT, OPERATION, RECOVERY

BY ALLAN C PARSONS, M R C S ENG, L R C P LOND,
HOUSE SURGEON TO THE VICTORIA HOSPITAL FOR SICK CHILDREN CHELSEA.

IN connexion with the correspondence as to adenoid growths in young children which has recently taken place in the columns of THE LANCET I have thought that the following case might be worth recording

The patient, a female infant, aged two years, was brought to the Victoria Hospital for Sick Children, Chelsea, on Jan. 1st 1899, by her father, who gave the following history of the case Three days previously, while playing in a room with her sister, the child fell on to the back of her head. Since then she had vomited three times, had taken little or no food, and had seemed altogether ill When seen at the hospital the patient seemed to be in a dazed condition There was no rise of temperature, and nothing very definite could be made out to account for the illness There was no evidence of any injury to the head or to the neck, but the head hung forward on to the chest and the child made no effort to keep it erect Rotatory movements could be performed in a normal manner The child was admitted for further observation and while in the hospital the symptoms at first seemed to point to some meningeal trouble She lay in bed with her legs drawn up On the second day there was marked retraction of the head and she was very peevish and irritable Constipation was present but there was no vomiting until the fifth day There was a slight, irregular pyrexia. The pulse was small and weak but it never exceeded 140 per minute The respiratory movements were chiefly carried out by the abdominal muscles and the mouth was kept open No dyspnœa was present The chest and the abdomen were apparently normal. About the fifth day retraction passed off and the patient became somewhat drowsy and apathetic and great difficulty was now experienced in feeding her for she seemed unable to swallow any fluids An examination of the throat and naso pharynx excluded the possibility of any post-pharyngeal suppuration The tonsils were both a good deal swollen the glands behind the jaw were enlarged, and the naso-pharynx was stuffed with adenoids Nasal feeding was adopted, but it set up an intense catarrh of the nasal and pharyngeal mucous membrane and a thin muco-purulent secretion was constantly trickling from the mouth and nose The mouth had to be swabbed out every half an hour or so and the towels had to be frequently changed These symptoms went on for three or four days until they gradually yielded to careful nursing, together with the employment of emetic doses of ipecacuanha and the application of towels soaked with eucalyptus The child began to take her food better, but was still very weak and listless Solution of strychnia in half minim doses every four hours was ordered The acute symptoms having passed off the child was prepared for operation and anæsthetised with chloroform The tonsils had considerably diminished in size, but a portion of the right tonsil was removed and the adenoids were carefully scraped away with the smallest size ring knife The operation had a very marked effect, both on the local condition and on the general behaviour of the child The discharge completely stopped, swallowing was no longer difficult, and the mouth was kept closed during respiration The improvement in the general condition was even more pronounced The child sat up in bed for the first time since admission, her head was held erect, she "talked" with the nurses and played with her toys, and seemed altogether a different being The patient was discharged on Jan 25th in perfect health

Chelsea.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib iv Proœmium.

KASR-EL-AINI HOSPITAL, CAIRO

A CASE OF SARCOMA OF THE OVARY WITH GENERAL SARCOMATOSIS OF THE PERITONEUM, NECROPSY

(Under the care of Dr FRANK COLE MADDEN)

THE peculiar property possessed by malignant growths in the peritoneal cavity of infecting distant parts of the peritoneal membrane is strikingly illustrated by the case which follows In some instances when the original tumour has been situated in the upper part of the cavity the secondary nodules have all developed in the pelvis or its neighbourhood, and this peculiarity in the localisation of the metastatic tumours is probably to be explained by the influence of gravity in bringing detached portions of the original growth to the lowest part of the abdomen Still more remarkable are cases, by no means rare in which a sarcomatous nodule on a piece of bowel has given rise to a similar mass on the neighbouring coil or the abdominal wall with which it has been usually in contact In all these cases we must postulate a direct transference of at least one of the original malignant cells The chance of this "peritoneal generalisation" of the growth markedly impairs the prognosis in cases of malignant disease of the abdominal or pelvic organs

An old Egyptian woman was on Feb 17th, 1899, admitted into the medical wards of the Kasr-el Aini Hospital, Cairo, for ascites As Dr Sandwith did not consider that there was sufficient evidence of disease of the heart or kidneys to account for her condition he asked Dr Madden to see the case with a view to perform an exploratory incision On examination the patient was found to be extremely emaciated and in considerable respiratory distress owing to an enormously distended abdomen She had a distinctly 'ovarian look"—if the expression may be used—and the abdominal cavity was full of fluid, indistinctly through which a "lumpiness" could be felt just at the upper part of the left iliac fossa There was slight tenderness in this situation By the vagina a hard mass was felt bulging into the posterior fornix high up and to the left side This seemed to correspond with the resistance felt on abdominal palpation The size of the uterus could not be made out

On the following day (Feb 18th), under an anæsthetic an incision was made in the middle line of the abdomen below the umbilicus and a large quantity of clear fluid was

in but slight degree to that poured out during health, (2) that there was no indication that this secretion was associated either with hyperacidity or hyperchlorhydria, and (3) that apart from the presence of blood there was nothing in the fluid indicative of a true lesion of the stomach

It has sometimes been suggested in cases like this, where there was abundant vomiting of blood, that we might be dealing with an ulcer of the stomach—an ulcer of the same type and significance as the perforating ulcer of the foot But it seems to me that, in this case at least, such a hypothesis is untenable and in other reported cases it appears equally wanting in proof It could hardly be expected that an ulcer which bled freely every two or three weeks would not leave some trace of its presence in the shape of disordered digestion, pain, or other symptom between the attacks But it has been pointed out that this patient enjoyed excellent gastric health between the crises, exhibiting no trace of stomach lesion on careful physical examination, and digesting so rapidly and perfectly that it was not possible to find any trace of a test dinner two and a half hours after its ingestion It is quite possible that in such cases the source of the bleeding lies in engorged or varicose veins around the cardiac end of the œsophagus

Glasgow

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

HALLUX VALGUS AND HAMMER TOE

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SURGEON TO THE LONDON TEMPERANCE HOSPITAL AND TO THE ROYAL EYE HOSPITAL FELLOW OF THE UNIVERSITY OF LONDON

AMONG the minor deformities the pathology of which is obscure and the treatment of which has varied from elaborate trifling to unduly mutilative heroism is hallux valgus with the closely allied hammer toe Congenital causation, ligamentous contracture, tendinous abbreviation, and external pressure have each and all been invoked to

FIG 1 FIG 2

Hallux valgus and hammer toe. Before operation. After resection of joints.

explain this inartistic and most discomforting deformity Treatment has of course, varied according to the view entertained as to the general or particular cause, and even recent works recommend amputation in despair of securing success by any less radical procedure It is curious that the "valgus" tendency in the toes should be almost the exclusive prerogative of the hallux The support afforded by the other toes might have been thought to operate in the direction of resisting such deviation But, as in the case illustrated above it will be seen that so strong was the valgus impulse that the coincident deformity of a hammer second toe afforded no obstacle Similarly it is the second digit which most frequently, though not exclusively, exhibits the "hammer" deformity Doubtless the free mobility of the metatarso-phalangeal and inter phalangeal joints, partaking of the nature of a universal and not only of a ginglymus movement, readily lends itself to extrinsic pressure Any deviation from the normal line once started would tend to be stereotyped by intrinsic assistance Thus the insertion of the innermost tendon of the extensor brevis digitorum into the base of the first phalanx of the big toe and the diagonal direction of its pull would coöperate in a valgus deviation Similarly the second toe alone has inserted into the base of its first phalanx the tendons of two dorsal interosseous muscles Here the malleus deformity once started would be assisted by muscular action and ligamentous shortenings would tend to perpetuate and to fix a dislocation in the first instance intermittent and reducible The good result of aseptic excision of the heads of the proximal bones without division of any tendons is well shown by Figs 1 and 2 reproduced from photographs taken before and after operation The case was one of combined hallux valgus and hammer toe in a woman, aged 38 years I operated on March 9th of this year, on the 18th the splints were left off, and on the 23rd the patient was discharged, walking well without pain and the toes in perfect position and naturally mobile

Albert terrace N W

NOTES ON SOME CASES ILLUSTRATING THE ADVANTAGES OF PARTIAL CHLOROFORM ANÆSTHESIA

BY LIEUTENANT-COLONEL E LAWRIE, M B EDIN, I M S,
RESIDENCY SURGEON HYDERABAD DECCAN

CASE 1 —The patient was a male native, aged 31 years The operation took place on Jan 14th, 1899 Food had last been taken at 7 P M on the previous day The operation was the aspiration of an abscess of the liver Mr Salar Musood, a third year student, was the chloroformist The administration commenced in one drachm doses at—

H.	M	S	
9	24	0	Natural regular breathing, blowing into the cap
9	25	0	Chloroform added to the cap, two breaths of air
9	25	40	Unconscious, needle inserted, the patient shouted and struggled a little
9	26	10	Pus was flowing, seven ounces were withdrawn
9	26	57	The needle was removed
9	28	7	The patient walked to bed

The total duration of the operation was four minutes and seven seconds and the amount of chloroform employed was two drachms

CASE 2 —The patient, a male native, aged 45 years, had last taken food at 6 A M on the day of the operation (Jan 14th, 1899) This operation also was the aspiration of an abscess of the liver and the chloroformist was Mr Salar Musood The administration commenced at—

H.	M	S	
9	30	15	Blowing regularly into the cap
9	31	30	Chloroform added, one breath of air taken
9	31	50	Unconscious
9	32	0	Needle inserted
9	32	16	Pus was flowing, 10 ounces were evacuated
9	33	13	The needle was withdrawn
9	34	8	The patient walked to bed

The operation lasted for three minutes and 53 seconds The amount of chloroform employed was two drachms

CASE 3 —A male native, aged 25 years, who had last taken food at 8 A M was operated upon on Jan 14th, 1899, the operation being, as in the two former cases, one of aspiration of an abscess of the liver Mr Salar Musood

could be that a direct hernia took its usual course, but that the intraparietal portion of the sac had increased and drawn up the external portion, an explanation which was suggested long ago by Mr John Cooper But he was inclined to adopt Mr Makins's view that the hernia was due to pouches or crypts which were supposed by Rokitansky to be due to irregularities in development of the peritoneum If the mouth of one of these crypts was large enough to allow of the entrance of a portion of omentum it might reach a very large size, as in the case of the jejuno-duodenal fossa

Mr MCADAM ECCLES said that if a patient had a direct inguinal epiplocele which was irreducible and violent taxis were applied the sac might be reduced and there would then be a diverticulum from the peritoneum which might be directed into the prevesical space He did not think that this was the explanation in the cases described by Mr Makins as there was another inguinal sac present It was very rare to have two inguinal sacs on one side as one inguinal hernia would tend to render that part of the peritoneum tense and so prevent protrusion He had met with a case which resembled that mentioned by Mr Hutchinson There was a hernia on the left side The patient had symptoms which Mr Eccles attributed to nipped omentum He explored the sac and found healthy omentum He therefore explored further and found a sac behind the os pubis containing a portion of omentum considerably congested but no intestine He drew this out and the symptoms were relieved

The PRESIDENT thought that the paper of Mr Makins and the observations of Mr Hutchinson were of the greatest importance and suggested that Mr Hutchinson's remarks should be recorded together with the paper One of the commonest forms of displaced hernia was that in which a rupture took place through the neck of a congenital hernia He mentioned two cases which he had met with of hernia into the prevesical space The first occurred in a patient who had a congenital hernia on the right side, for which he had worn a truss and which he used to replace himself when it came down On one occasion after such reduction acute symptoms came on When seen on the third day there was a hard tumour in front of the bladder reaching almost to the left inguinal ring and half-way up to the umbilicus Mr Bryant explored the hernia and passed his finger through the ring and found the opening through which the intestine had passed and he was able to draw out some inches of deeply congested but still glistening gut and the patient made an excellent recovery. In the second case there was a hernia through the external ring which was reducible but returned at once and there was a tense mass in front of the bladder On exploring as in the former case Mr Bryant was able to draw out of a prevesical sac some omentum and a loop of intestine In this case he believed there had been rupture at the neck of the sac

Mr MAKINS, in reply, said that little pouches such as he referred to could often be seen in the cadaver if the anterior abdominal wall were examined from behind and the development of a hernia in them was like that in the case of the retro-cæcal fossa

MEDICAL SOCIETY OF LONDON

Exhibition of Cases

A CLINICAL meeting of this society was held on April 10th, Mr G R. TURNER, Vice-President, being in the chair

Mr W H BATTLE showed an infant, three months old, with a Cephalhydrocele on the right side The swelling was on the right side of the head, a little in front of the coronal suture It was first noticed three weeks after birth It now measured two inches by one and a quarter inches It was soft, fluctuating and pulsated freely It could be partly reduced within the skull by pressure and then the edges of the bone could be felt to be everted Mr Battle thought that the protrusion was probably due to injury at birth at which instrumental assistance was required

Mr BATTLE also showed a woman on whom he had performed Gastrostomy by the method of Albert She was suffering from an obstruction in the œsophagus about six inches from the top The stomach was exposed by an incision through the rectus muscle and a considerable portion of the viscus was drawn out in the shape of a cone The peritoneal surface of the base of the cone was sutured to the parietal peritoneum and the apex of the cone was passed along beneath the subcutaneous layer of the abdominal wall and brought out through an incision about two inches higher In this way a kind of sphincter was obtained where the viscus passed through the rectus muscle and the subcutaneous portion imitated an œsophagus She retained food quite well when she was fed by a tube through the opening, but for some unexplained reason on several occasions when she had swallowed fluids they were rejected from the opening

Dr G E HERMAN showed a woman, aged 49 years, as a case of Cure of Recurrent Cancer of the Breast following treatment by oöphorectomy and thyroid extract The right breast had been removed with the pectoral fascia and axillary glands by Mr Lawson in Middlesex Hospital in May, 1895, and a local recurrence was removed in October of the same year In April, 1896, the old wound reopened and in July, 1898, when she came under the care of Dr Herman there was an ulcerated surface over the site of the right breast measuring three and a half inches by one and a half inches There was a scirrhous lump three inches across in the left breast and the glands in the left axilla were enlarged Menstruation had become irregular probably from the onset of the menopause On July 12th, 1898, Dr Herman removed both ovaries and gave the patient thyroid extract internally and had continued this treatment up to the present time By March the ulcer had soundly healed but there were some keloid like nodules remaining These, however, had not altered in size for some months The lump in the left breast had completely disappeared though the nipple was still retracted and the axillary glands could no longer be felt Another patient whose case he had published some time ago was perfectly well at the present time Dr Herman considered that the results of the combined treatment were more promising than those of treatment by oöphorectomy alone or by thyroid medication alone —Mr STANLEY BOYD was not quite sure that the nodules in the cicatrix were non malignant In the second case in which he had performed oöphorectomy there had been red patches which were rendered more prominent after handling like those in the neighbourhood of the nodules in Dr Herman's patient, and recurrence of growth took place there This patient was unable to take thyroid extract Mr Boyd was not convinced of the efficacy of thyroid treatment The most striking case was that of Bishop and Page in which it was given to a patient for recurrent cancer for 12 months, the tumour remaining stationary She then disappeared, but reported herself six months later when the whole of the disease had disappeared But against this it must be remembered that Mr Pearce Gould had published a case in which a large tumour of the femur and many disseminated nodules secondary to cancer of the breast disappeared spontaneously in a short time without any special treatment The patient was still well. It was noteworthy that in Mr Gould's case, as in Dr Herman's case, the patient was about at the menopause —Mr BATTLE also thought that the nodules indicated that the growth was not wholly absorbed — Mr TURNER remarked that at any rate the lump in the left breast had disappeared He would not like to say that the nodules were malignant He had removed similar nodules and had found them on microscopic examination to be non malignant

Mr G R TURNER showed a case of Ununited Fracture of the Humerus The patient first broke his arm at sea The fracture did not unite and an operation was performed Still no union occurred He then came under the care of Mr Turner As he was a syphilitic subject he put him first on anti syphilitic treatment and later wired the bones There was abundant callus but no union He operated a second time, this time with success, and the man returned to work At sea, however, owing to a sudden jerk he broke the bone at the same place Mr Turner again operated, but although a skiagram showed that the bones were in excellent position no union had resulted There had been no suppuration at any of the operations Mr Turner was inclined to think that it might be worth while to excite some suppuration by passing a seton through in the old fashioned way —Mr BATTLE asked what was the state of the bones at the time of the first operation He mentioned a case of ununited fracture in which a first operation was unsuccessful but after the second anti syphilitic treatment was given and this operation was quite successful —Mr TURNER, in reply, said that he did not perform the first operation When he operated he found the fragments pointed and separated by fibrous tissue

Mr F JAFFREY showed a large Pachydermatocele of the

evacuated In the left iliac fossa just above the brim of the pelvis, a hard mass was seen and felt, consisting apparently of a collection of tense cysts It was firmly adherent all round and the Fallopian tube was attached to its upper border Some of the adhesions at the side were broken down with the finger and a definite capsule was opened, from which a tumour of the size of a kidney was easily shelled out The greater part of the capsule was removed together with the Fallopian tube The ovary on the right side was cystic and adherent and was also removed During the operation a hard mass was felt running across the abdomen just above the umbilicus, apparently continuous with the spleen and extending into the right side of the abdomen A few suspicious nodules were seen on a coil of intestine which came into view during the latter part of the operation The abdominal wound was closed with silkworm gut sutures, a glass drainage tube being placed in the left side of the pelvic cavity The patient never rallied from the operation and died the next day On examining the mass which had been removed it was found to be fairly hard throughout, but several rounded elastic lumps were felt on the surface in various parts On cutting into it its consistence was firmly elastic and fleshy not unlike muscular tissue, and several rounded masses were distributed throughout this fleshy matrix

Necropsy —On post-mortem examination by Dr Symmers there was found to be some thickening of the aortic valves as well as marked atheroma of the first part of the aorta, which was considerably dilated There was an intense inflammation of the pelvic peritoneum The parietal peritoneum throughout the abdomen was studded with a great number of small raised sarcomatous nodules (about one sixth of an inch in diameter on an average) Many of the patches contained a jet black pigment The visceral peritoneum was thickly covered with similar nodules, none of which, however, contained pigment The eruption was especially well marked on the stomach, both on the anterior and posterior surfaces, and throughout the mesentery The omentum was retracted and rolled up along the lower border of the stomach into a mass about two inches thick, which was extremely hard and extended nearly right across the abdomen Scattered throughout this mass were a number of small rounded tumours The other organs were normal but the liver was covered with shaggy lymph around the portal fissure On subsequent microscopical examination the tumour was found to be a large round-celled sarcoma No trace of ovarian tissue was found

Remarks by Dr MADDEN —Had the presence of these nodules on the peritoneum surrounding the intestine been discovered at an earlier stage of the operation the uselessness of operative interference would have at once been recognised It was not, however, until the capsule of the tumour had been torn through that the nature of the "cysts" became evident The hard omental mass was another suspicious circumstance, the importance of which should have been more appreciated However, the interesting feature of the case is its pathology, which clearly indicates the futility of any radical operative measures in such conditions

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Prevesical Hernia

A MEETING of this society was held on April 11th, the President Mr BRYANT, being in the chair

Mr G H MAKINS read a paper on Prevesical Hernia and related a case in which subacute strangulation occurred The paper was founded on the following case A healthy man, aged 40 years, subsequently to getting wet through, was attacked with violent pain in the right iliac fossa, attended with retching and some rise of temperature He was found to have a reducible right inguinal hernia which was replaced without any definite influence on the symptoms The latter, however, subsided under treatment by rest in bed poulticing, and light diet On resuming his ordinary mode of life three weeks later the man was attacked in a similar manner The symptoms were again relieved by the same treatment, but tenderness persisted in the right iliac region He was admitted into St Thomas's Hospital under the care of Dr H P Hawkins and examined under an anæsthetic, when a hard nodular tumour was discovered in the right iliac fossa extending across the hypogastric region into the left iliac fossa. An abdominal exploration performed eight weeks after the first attack revealed a subperitoneal tumour, to the upper surface of which small intestine was adherent as the result of previous peritonitis The urinary bladder was found to be displaced backwards and to the left The tumour was stripped out of the pelvis, a small area of peritoneum being removed with it, a continuous stalk of great omentum needing division for its complete liberation. After removal the tumour proved to be a large reniform hernial diverticulum containing adherent omentum The sac had been removed entire with its neck Removal of the sac, together with its neck, in no way influenced the descent of the co existing right inguinal hernia The patient made a rapid recovery without the occurrence of any untoward incident Mr Makins quoted a similar case recorded by Parise which he considered to be identical in nature with his own Four cases of properitoneal hernia in which the internal sac projected into the vesical region were also quoted An attempt was made to distinguish between the two "true prevesical" cases and the properitoneal, the former being regarded as hernia into special peritoneal diverticula independent of pre existing or subsequent inguinal hernia, while in the latter the sac formed an integral part of the inguinal hernia Mr Makins considered his own case to be an instance of a hernial pouch forming in the position of a direct inguinal hernia—that is in the middle inguinal fossa between the epigastric and obliterated hypogastric arteries such pouch opposed in its further development by the resistance of the conjoined tendon being diverted and taking an internal course in front of the bladder in the subperitoneal space, and, further, that the prevesical sac was in all respects independent of the co-existing acquired right inguinal hernia.

Mr JONATHAN HUTCHINSON, jun , related a similar case which had been recently under his care The patient was a man who was quite healthy except that he had had for a long time a right inguinal rupture This had given little trouble and had not been down for seven weeks, so that taxis or too vigorous pressure of a truss could not have been responsible for the development of symptoms which came on without obvious cause He was seized with pain in the lower part of the abdomen and with vomiting The pain persisted and he was admitted into the London Hospital Mr Hutchinson explored the inguinal region and on passing his finger through the ring found that there was fulness on the inner side of the canal He therefore performed abdominal section within 24 hours of the onset of symptoms He found a ring shaped opening immediately to the right of the bladder leading into the pouch in which a loop of intestine was strangulated On notching the ring the bowel was easily turned out The neck of the pouch was then sutured up and the patient made a good recovery This form of hernia must be very rare as no other case had been met with at the London Hospital during the last 15 years He could hardly agree that true prevesical hernia were similar in nature to retro peritoneal hernia independent of previously existing pouches It was noteworthy that in all the recorded cases except one—and there the record was deficient—an ordinary hernia was known to have existed previously If a hernia were returned *en masse* the peritoneum would be rendered lax and prone to the formation of pouches, but this could not have been the explanation in his case Another possible explanation of the formation of pouches arose from the frequency with which the bladder was found in close contact with an inguinal sac It was possible that by the contraction of the bladder part of the sac might be drawn out and form a pouch Whatever the explanation of the occurrence of these rare forms of hernia the practical conclusion to be drawn from the cases was that where there were symptoms of internal obstruction and a history of previous hernia the surgeon should not hesitate to perform laparotomy and to explore other regions besides the inguinal canals

Mr J F MACready said that Mr Makins had spoken of the sac first as formed from independent pouches of peritoneum and afterwards as the diverted sac of a direct inguinal hernia Both could hardly be correct, as a direct hernia could hardly be said to have a sac until it had passed through the conjoined tendon One possible explanation

hoarse and simultaneously experienced an Accumulation of and Difficulty in Expectorating his Saliva He continued his professional duties with difficulty Examination showed the left side of the palate, the pharynx and the left vocal cord, the left sterno-mastoid, and the upper part of the left trapezius to be completely paralysed At the onset the patient experienced no pain, giddiness, convulsions, or any other general symptoms beyond those due to the cold and Dr Tilley agreed with Dr Caley that the case was probably one of pachymeningitis involving the trunk of the spinal accessory after the cervical and spinal portions had united within the skull. There was no history of gout, syphilis, or rheumatism

Dr HERBERT TILLEY also showed a female, aged 31 years, with Paresis of the Left Side of the Palate, the Pharynx, and the Left Vocal Cord and the Right Side of the Tongue In October, 1898, she suffered for two or three weeks from very severe pain on the back of the head and neck which ended in "fits," details of which cannot be obtained In the first she did not lose consciousness but did so in a second "fit" three days later, on recovery from which she was hoarse and paralysed in the left arm and leg The patient was in bed for five weeks and was sustained at first by nutrient enemata and the stomach pump because swallowing was impossible owing to fluids escaping through the nose Her condition rapidly improved, the arm and leg recovering their power but the throat weakness remaining When first seen by Dr Tilley there were in addition to the above throat lesions slight paresis of the left lower facial muscles, protrusion of the tongue to the right side (slight), contraction of the left pupil and a small warty-like growth on the mucous membrane of the right arytenoid cartilage It was difficult to conceive any single lesion which would explain the above condition Dr Tilley remarked on the rarity of laryngeal and pharyngeal lesions in syringomyelia, the slight effect on the voice of paralysis of one vocal cord, and the way in which such cases as these upheld the experimental evidence of Horsley and Beevor that the spinal accessory nerve supplies the muscles of the palate, the pharynx (partial), and the larynx.

Mr NOBLE SMITH showed a patient aged 21 years, upon whom he had operated for Spasmodic Torticollis by excising a piece of the spinal accessory nerve just above its entry into the sterno-mastoid muscle This was on the right side, he had previously operated upon the left side four years ago Both operations had been successful and it was remarkable that on the left side (the first operation) the function of the nerve had been restored six months subsequently to its division It had been necessary on that occasion also to divide the external branches of the second, third, and fourth cervical nerves on the right side The patient had gradually improved in health and strength, but recently some spasms had developed in the right sterno-mastoid. He had subjected the patient to a course of special exercises and massage which had still further strengthened her, but this treatment had not relieved the spasm, so he had recently operated on the right spinal accessory The patient had been able to be up and about six days after the operation She was exhibited at the meeting and it was found that the right sterno-mastoid and the upper portion of the trapezius were completely paralysed, but that the patient was in no way inconvenienced by this loss of power

Dr LEONARD GUTHRIE in discussing the above cases referred to the regression of symptoms which had occurred in Dr Tilley's case of syringomyelia. In 1896 he (Dr Guthrie) had shown before the society a woman, aged 28 years, who had nystagmus complete analgesia, and thermo-anæsthesia, with blunted tactile sensation in the whole of the left upper extremity and left side of the head, face, neck, and chest to the level of the third rib She had also paralysis of the left side of the soft palate and of the left vocal cord The analgesia, &c, had followed immediately a violent attack of sneezing three months previously whilst paralysis of the spinal accessory occurred immediately after an attack of coughing two months later In the course of about a year these symptoms had to a great extent disappeared He attributed the sudden onset of symptoms to hæmorrhage in or near a syringomyelic cavity and their subsidence to its absorption —The cases were also discussed by Mr JACKSON CLARKE and the CHAIRMAN

Dr WILLIAM EWART exhibited the organs from a case of Extensive Calcification of an Adherent Pericardium causing Inveterate Ascites (tapped 52 times) which was attributed to hepatic cirrhosis and ineffectually treated by laparotomy and artificial production of adhesions There was an unusual condition of the peritoneum The patient, aged 49 years, had had rheumatic fever at the age of 18 years and twice since There was no history of alcoholism, but she had drunk vinegar from the bottle in large quantities when a young girl. When admitted into St George's Hospital in July, 1895, she had had swelling of the abdomen and slightly of the legs for 18 months The diagnosis of cirrhosis was made on the strength of the predominance of ascites, of the enlargement of the liver, and of the absence of albuminuria and of any apparent heart failure, the pulse being always good and strong, though at that time pericardial friction and an apical systolic murmur were audible, which subsequently disappeared In August 1897, after many tappings, Mr J W Haward carried out the operation devised by Drummond and Morison The patient recovered after severe and almost fatal peritonitis The relief as regards the ascites was purely temporary and she died from gradual exhaustion after 52 tappings in August, 1898 The pericardium was found to be universally adherent and stiffened by a layer of calcareous salts which must have precluded the contraction of the ventricles, but the auricles were not calcified and their contraction may not have been interfered with The liver was not cirrhosed. The other abdominal viscera were healthy, but they formed together with the liver an adherent mass firmly connected with the abdominal walls and occupying the upper half of the abdomen. In the lower half which contained ascitic fluid only no bowel was visible except the descending colon The bowel was gathered together into a spherical mass completely lined by membrane and this mass projected downwards into the upper part of the ascitic cavity which resembled a second peritoneal sac The recurrent ascites was of interest in connexion with its cause which was not cirrhosis as suspected but cardiac obstruction Drummond and Morison have recorded a case in which at the operation the liver was found to be free from cirrhosis, but the cause of the ascites was not made out, no post-mortem examination having been obtained. This case was similar to that described above for the patient survived the operation 19 months and was tapped 69 times

ROYAL ACADEMY OF MEDICINE IN IRELAND

SECTION OF PATHOLOGY

Pneumococcal Septicæmia —Hodgkin's Disease —Epithelioma of the Lip —Tumour of the Male Breast —Sarcoma of the Suprarenal Bodies

A MEETING of this section was held on Feb 24th, Dr J M PURSER, the President, being in the chair

Dr E J MCWEENEY communicated a case of Pneumococcal Septicæmia with Ulcerative Endocarditis consecutive to Croupous Pneumonia The patient, a man, aged 37 years was admitted on Dec. 5th, 1898, to the Mater Misericordiæ Hospital with right apical pneumonia Crisis occurred on the ninth day and it was attended with a good deal of collapse 10 days later the patient was allowed to get up and was found to be very weak. On Jan 1st an aortic systolic murmur developed which became very loud, the patient became prostrate and delirious, the temperature curve assumed a pyæmic type, and death ensued on Jan 5th On Jan 2nd blood was taken, with strict precautions from the finger and was inoculated by means of a pipette on several tubes of oblique glycerine agar After 24 hours' incubation at 37° C one of these tubes presented a few extremely minute dewdrop-like colonies which proved to consist of Fränkel's pneumococcus The other tubes remained sterile as far as could be seen At the necropsy (48 hours later) blood was aspirated from the right auricle into a sterile bulbed pipette and inoculated on agar tubes Owing to the solid coagulation but little liquid could be obtained. The incubated tubes showed numerous large circular colonies like discs of porcelain (probably the bacillus coli) but also very many minute whitish colonies of the pneumococcus A broth culture from one of them after 24 hours at 37° C was scarcely turbid, yet one cubic centimetre injected intra peritoneally into a rabbit caused death

Scalp of congenital origin in a man, aged 32 years These cases were sometimes described as molluscum pendulum — Mr TURNER mentioned a case in which removal was attempted, but there was great hæmorrhage from nævoid tissue of which the tumour was partly composed He also mentioned another case in which there was a similar molluscous growth on the buttocks which hung down to the patient's knees

Mr JAFFREY also showed a boy, aged 15 years, suffering from a severe Stutter When suddenly asked a question he became very red, all the muscles of his face were contracted, and his left arm was drawn up to his mouth, so that the phenomena suggested epileptiform convulsions There was no loss of consciousness He had had several falls on his head and there was a depression on the left side near the vertex, but Mr Jaffrey did not think that there was any organic lesion of the brain —Mr TURNER said that the lad had been under his care and he agreed that the trouble was functional in character

OBSTETRICAL SOCIETY OF LONDON

Puerperal Eclampsia —Causes of Difficult Labour —Exhibition of Specimens

A MEETING of this society was held at 20 Hanover square, W, on April 5th, Mr ALBAN DORAN, President, being in the chair

Dr W S A GRIFFITH and Dr EDEN communicated notes of a case of Puerperal Eclampsia, with a description of a five weeks ovum removed in a subsequent pregnancy The patient was a married woman, aged 32 years, who suffered from eclampsia at about the seventh or eighth month of her third pregnancy Labour was induced by Dr Griffith with the intra uterine bougie and she recovered About 18 months afterwards she again became pregnant and severe symptoms ensued as early as the fifth week. Dr Archibald Garrod reported that there was evidence in the urine of chronic nephritis and the uterus was therefore dilated by the rapid method and the ovum was removed The symptoms thereupon rapidly disappeared but a trace of albumin persisted in the urine for some time The ovum removed was in naked eye appearances healthy but it showed certain microscopic changes which were described It was shown that the fœtus had survived up to or within a very short time of the removal of the ovum, the changes described were therefore primary and were probably due either to a pre existing unhealthy condition of the endometrium or to malnutrition following upon an unhealthy state of the maternal blood associated with chronic nephritis —The PRESIDENT observed that a great deal had been written recently on eclampsia, the source of the disease and its treatment had been much disputed Winkler insisted that it always arose from renal disease in the mother Hoffmann traced it to toxemia from carbamide of ammonium Baron and Castaigne declared that it arose from toxic elements developed in the living fœtus, the fits often ceasing when it died, Schaller, on the other hand, seemed to have little belief in any active influence of the fœtus, denying that its kidneys ever acted before parturition In the case under discussion the mother had nephritis and the fœtus showed diseased tissues, so it was not certain where the origin of the eclampsia lay, though most likely it lay in the mother As for treatment, delivery seemed usually successful Van Rootijen and Lambinon of Liege bleed in bad cases, but the great success of subcutaneous saline infusions in puerperal septicæmia and in sepsis after abdominal sections (Howard Kelly) seemed to indicate the correct treatment for eclampsia unrelieved after expulsion of the fœtus Poncet and Vinay treated successfully a severe case of eclampsia by this method —Dr STABB asked Dr Griffith whether the percentage and daily amount of urea had been estimated, this being, in his opinion much more important than the amount of albumin and subcutaneous œdema — Dr AMAND ROUTH asked why Dr Griffith had adopted the slow method of inducing premature labour by inserting a bougie instead of the more rapid and certain one of rupturing the membranes He thought the evidence that puerperal eclampsia was due to a toxæmia was clear and that the origin of the toxin was some bio-chemical change in either the placenta or the fœtus —Dr LEA asked what were the severe symptoms rendering artificial abortion necessary at the fifth week of gestation He thought that a toxemia was perhaps the cause of the nephritis becoming so much aggravated —Dr GRIFFITH and Dr EDEN replied

Dr R G MCKERRON read a communication on Antero-posterior Positions of the Head as a Cause of Difficult Labour, with notes of two cases In the first case the patient was a woman, aged 41 years, who had had 10 full term children, the labours had been difficult with the use of forceps She had when seen by Dr McKerron been attended by a midwife for over nine hours, the os had a diameter of rather more than two and a half inches, the head was above the brim, the occiput was anterior, the posterior fontanelle was one and a quarter inches from the symphysis, the sagittal suture running almost directly backwards Traction with Simpson's forceps failed to produce any advance The occiput was rotated with the forceps so as to bring the long diameter of the head into the oblique diameter of the pelvis, the head then passed the brim with moderate traction and the labour was concluded with ease The child died three days later, the mother made a good recovery The measurements of the pelvis were inter-spinous, 8 75 inches, intercristal, 10 25 inches, and external conjugate 7 1 inches The second case was that of a woman, aged 38 years the mother of one child, who was delivered by forceps after a protracted labour Presentation and delivery were the same as in the first case The child died on the third day The subdural space was found to be distended with blood. The mother recovered The pelvic measurements were inter-spinous, 9 inches, intercristal, 10·6 inches, and external conjugate, 7 5 inches Dr McKerron remarked upon the rarity of this presentation

Dr AMAND ROUTH showed a specimen of Myxo-sarcoma of the Uterus removed by hysterectomy

Dr LEA showed a specimen of Hæmato-salpinx occurring in chronic salpingitis

HARVEIAN SOCIETY OF LONDON

Exhibition of Cases and Specimens

A CLINICAL evening of the above society was held on April 6th, Dr H A CALEY being in the chair

Mr W H BATTLE showed two female patients on whom he had operated for Obstruction due to Malignant Growth of the large bowel The first was a case of growth in the splenic flexure with the gradual onset of symptoms for a period of four weeks The patient was aged 28 years and as there was extreme distension, so that it was impossible to bring the growth to the surface and inadvisable to prolong operation, a temporary colotomy was performed under the left ribs An operation five weeks later of excision of the growth and artificial anus with lateral anastomosis was done most successfully This was in September, 1898 The second patient was a woman, aged 46 years for whom operation for obstruction was done in August, 1898, and a growth of sigmoid flexure treated by Paul's method Subsequent attempts to get rid of the spur were painful and tedious, ultimately a lateral anastomosis had been done and the artificial anus closed Both had regular action of the bowels and looked remarkably well —In answer to Mr RAYMOND JOHNSON Mr BATTLE said that in his experience the best results in excising portions of intestine had been obtained by completely closing the ends of the bowel and then establishing a lateral anastomosis

Dr HERBERT TILLEY showed a case of Syringomyelia in a girl, aged 15 years, in which there was paresis of the right half of the palate, pharynx, and right vocal cord Other points of interest were the blunting of painful and complete loss of thermal impressions all over both superior extremities and certain well-defined areas of the neck and trunk, atrophy of the small muscles of the hands, the latter being in the *main en griffe* position, moderate wasting of the flexors and extensors of the wrist, and slight nystagmical jerks of both eyes (vide Proceedings of the London Laryngological Society December, 1898) A painless but severe burn on the hand and a gruffness of the voice with some difficulty of swallowing first led the patient to seek advice The pharyngeal and laryngeal conditions have much improved during the past two months, during which time she has been taking strychnine

Dr HERBERT TILLEY also showed a man, aged 55 years, a preacher, who in October, 1897, caught cold, became

practical usefulness" Reference is also made to yellow fever, the bacillus of Sanarelli being generally accepted as the probable cause, although the experiments which have been made to attempt to produce a protective and curative serum are by no means conclusive Reference to the text in this section, as throughout the book, is rendered very easy by the free use of dark type drawing attention to the various points under discussion

The section on General Surgery is conducted by Dr W W Keen, Professor of Surgery at the Jefferson Medical College, Philadelphia, and Dr J Chalmers Da Costa, Clinical Professor of Surgery at the same college These authors consider that, with two striking exceptions, surgical progress has not been revolutionary but has consisted rather in the accumulation of statistical information regarding various diseases, injuries, and operations, the improvement of diagnostic methods and the perfection of operative details One of the exceptions alluded to is the performance of total gastrectomy by Schlatter and others for malignant disease of the stomach and the other is the plan for treating pulmonary tuberculosis by injecting nitrogen gas into the pleural sac and so producing pneumothorax. We believe that we are correct in saying that this "revolutionary" proceeding has not been attempted in this country Reference is also made to the many operations which have been performed for the forcible correction of the deformity occurring in Pott's disease of the spine after the method of Calot and Chipault We endorse the statement that the operation "has not yet obtained general confidence The profession as a whole is disposed to wait for a time in order to determine whether the results are permanent"

Dr B C Hirst, Professor of Obstetrics in the University of Pennsylvania, and Dr W A Newman Dorland, Assistant Demonstrator of Obstetrics in the same University, edit the section on Obstetrics, and they consider the most striking feature of the year to be the great impetus which has been noted in the microscopy of obstetrics especially in the field of fœtal pathology The kindred subject of Gynæcology is looked after by Dr J M Baldy, Professor of Gynæcology at the Philadelphia Polyclinic, and Dr Dorland The opening words are remarkable "On looking over the field one cannot but be strongly impressed with the striking change that has come over the sentiment of the abdominal surgeon during the past few months the aim to-day is to see not how much can be safely removed, but how many of the pelvic organs can be saved Hence we see myomectomy supplanting hysterectomy, and vaginal incision and drainage making heavy inroads upon abdominal section—this is a step in the right direction.' "Pediatrics" receives a due amount of attention from Dr Louis Starr and Dr A. Hand, jun both of Philadelphia, who remark that special attention has been given during the past year to the management of children both as individuals and when grouped together in schools and public places

The section on Pathology is a particularly interesting one and is written by Dr J Guitéras, Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, and Dr D Riesman, Adjunct Professor of Clinical Medicine and Therapeutics at the Philadelphia Polyclinic They remark that the attention of pathologists during the past year has largely been centred on cellular changes 'and it may be truly said that the study of cellular pathology has never been more active and vigorous than now" They also point out that diseases in which it was formerly customary to pass over the anatomical changes in silence have been found to possess a distinct pathology and to show cellular alterations which if not always specific, are yet significant.

Dr A. Church, Professor of Mental Diseases in the North western University Chicago edits the section on Nervous and Mental Diseases, Dr Gibney, Clinical Professor of Orthopædic Surgery, College of Physicians and Surgeons, New York, and Dr Waterman, of the New York Polyclinic, write on Orthopædic Surgery, and Dr Kansell and Dr Reber, both of the Philadelphia Polyclinic, are responsible for the epitome of Ophthalmology All these sections contain much that is interesting Chapters will also be found on Otology, Diseases of the Nose and Larynx, Cutaneous Medicine and Syphilis, Materia Medica, Anatomy, Physiology, Legal Medicine (by Dr Wyatt Johnston of Montreal), Public Hygiene and Preventive Medicine, and Physiological Chemistry, so that the work can be characterised as most complete and we have nothing but praise for the whole production

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Braid on Hypnotism Neurypnology, or the Rationale of Nervous Sleep considered in Relation to Animal Magnetism or Mesmerism, and Illustrated by Numerous Cases By JAMES BRAID M R C S, C M W S, &c A new edition by ARTHUR EDWARD WAITE London George Redway 1899 Pp 380 Price 10*s* 6*d*

IT is a curious commentary on the history of the development of hypnotism that the writings of James Braid of Manchester should have till now remained practically neglected and that it should have been left to the industry and critical research of a German physician (the late Professor Preyer[1] of Jena) to have brought before the scientific world the first adequate account of Braid's work In the present work Mr Waite gives the reader a careful and on the whole lucid account of the circumstances under which James Braid s work and experiments began and of the writings and publications in which he sought to win acceptance for his views As early as 1842 Braid, who was then a surgeon practising at Manchester, published a letter addressed to a clergyman "On Satanic Agency and Mesmerism," in which he sought to confute the idea of a mysterious essence or agency passing from operator to subject which was inculcated by the school of Mesmer, as also to combat certain superstitions then prevalent regarding the phenomena of mesmerism In the following year appeared Braid's work on "Neurypnology, or the Rationale of Nervous Sleep" This work, remarkable alike for its candour and honesty, for the care and conscientiousness with which the writer experimented, and the lucidity and cogency with which he recorded and marshalled his results, found wide and earnest acceptance Braid in the first part of his work expounds fully the mode of inducing hypnotic phenomena, and in the second part he gives details of cases treated by hypnotism for such complaints as deafness, loss of voice (aphonia), and paralysis of limbs, headache and neuralgia, spinal irritation, epilepsy, &c In many of these no doubt a large hysterical element (according to modern conceptions) must have existed, and the cases recorded are not unlike those which have been observed in recent years at Paris Nancy, and Lourdes Short and interesting accounts are given of 66 cases, and here as elsewhere we find in Braid the careful and conscientious observer, cautious in drawing conclusions, and exhibiting throughout a wholesome and healthy scepticism The chapter to which we refer is of permanent value and may be read even now with pleasure and profit. A series of notes added in the appendix by the editor should be especially mentioned. These refer to views taught or discussed by Braid in his other and minor publications and dealing with such topics as "trance," hypnotism of the insane and others of interest, the work concludes with a very complete bibliography of Braid s writings which will be welcome to all book lovers

[1] In his Entdeckung des Hypnotismus."

nutmeg appearance The spleen was enlarged and had one recent infarct and scars of old ones —The President read an exhaustive paper on Internal Hæmorrhoids and illustrated it by photographs He said that the incidence of that state was three times greater in males than in females and that 76 cases occurred among the sedentary to 20 in the active, and the most frequent times of developing were the fourth and fifth decades The most potent causal factor was constipation, but enlarged prostate, vesical calculus, urethral stricture, and diarrhœa were also operative and heredity played its part He reviewed the various operations for their cure and decided in favour of Salmon's If recurrent hæmorrhage followed he plugged with a hollow vulcanite tube and pushed along outside this plain or styptic wool into the bowel, leaving it *in situ* 48 hours

BIRKENHEAD MEDICAL SOCIETY —A meeting of this society was held on March 10th, Mr H Nazeby Harrington, President, being in the chair —A discussion on Instrumental Midwifery was introduced by Dr E Brien After tracing the history of the forceps he touched upon the mechanism of labour and then went on to the cases in which forceps were indicated, describing the actions and the different applications of the instrument After comparing the English and Continental methods he discussed the operation in a general way and called attention particularly to the advantages of axis traction forceps over ordinary ones —A discussion followed and Dr Brien replied — Dr Sydney Marsden read a paper on the Pathology and Treatment of Ringworm He dwelt on the known pathological lesions caused by the fungus of tinea tonsurans, &c, and referred to the researches of Macfadyen, Bitter, Fermi, Lauder Brunton, Rosenbach and Sabouraud, also to the work of Gruby carried out in 1842–44, and finally to the researches of Macfadyen and Blaxall and Leslie Roberts of Liverpool, and then passed on to suggestions for treatment In conclusion he said "The object of this short paper is chiefly to bring before you the disease in connexion with its high infectivity and the desirability of some steps being taken to have the disease notified to the medical officer of health Ringworm of the scalp is excessively frequent in this country It is a standing cause of nuisance and difficulty in our elementary and other schools and not infrequently leads to a child's temporary exclusion for weeks or months and may interfere seriously with his life prospect And it is here that the importance of notification and *control* will be seen and would be of great value On these grounds therefore I advocate its notification'—An interesting discussion followed, in which the following members took part—viz, Mr Stansfield, Dr Temple, Dr Brien, and Dr A O Harris — Dr Marsden replied

WEST KENT MEDICO-CHIRURGICAL SOCIETY — The sixth meeting of the forty third session of this society was held at the Royal Kent Dispensary on April 7th The President, Dr Morgan Dockrell, occupied the chair — Dr Heron introduced a discussion on Tuberculosis, with special reference to Treatment He dealt first with the different ways in which tuberculosis was spread and then he referred to the methods of preventing it He next discussed the different methods of treatment such as serotherapy tuberculin, and the open air treatment which he declared was not new but very old —Mr Ernest Clark read a short paper on Tuberculous Disease in the Eye and Mr Mayo Collier discussed Tuberculosis as it was found in the larynx, the pharynx, and the nose He pointed out the diagnostic marks between tuberculous and syphilitic abscess of the throat —The President having read a paper on Tuberculosis of the Skin the discussion was adjourned

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MAGISTRATES AND LUNACY CERTIFICATES —An inquest was held in Exeter on April 1st upon the body of a woman, aged 46 years, who according to medical evidence had died from the effects of an irritant poison on March 29th The deceased who had previously been in an asylum was examined on Feb 1st by Dr Mackeith who certified that she was of unsound mind, but a magistrate who visited her subsequently refused to give a certificate and consequently she was not removed to an asylum The coroner remarked that the magistrate was very unwise to have acted in the way he had done The jury returned a verdict of "Death from poisoning," and expressed the opinion that the magistrate was wrong in refusing to grant an order for removal to the asylum

Reviews and Notices of Books.

Manual of Bacteriological Technique and Special Bacteriology By THOMAS BOWHILL, F R C V S, F R P S With 100 Original Illustrations Edinburgh Oliver and Boyd London Simpkin, Marshall, and Co, Limited 1899 Pp 269 Price 21s

IN this book Mr Bowhill has brought together a large number of useful directions—indeed, as far as material goes there is the making of an excellent manual in the volume before us *Most of the ordinary processes used in bacteriology* are described sufficiently clearly, whilst such methods as those employed for the preparation and use of anti diphtheritic serum are not forgotten It is quite apparent, however, that the author has yet to realise that merely to translate German sentences word by word does not constitute the whole art of writing English, whilst his rendering of the Latin tongue is singularly deficient

We are of course prepared for some mistakes in a first edition, but even an indulgent reviewer is obliged to notice and to protest against the introduction of such terms as *aqua distilli*, *aqua distilli boiled*, or *Bacterium coli communu*, whilst when we find that this last is actually corrected in the "Errata" to *Bacterium coli communie* (*sic*) the patience of the most indulgent reader is sorely tried To give some idea of the lucidity of the directions for certain operations in photo-micrography it will be sufficient to quote a single paragraph This is how the reader is told to determine the magnification of the image on the ground glass screen. "Take a stage micromillimeter [*sic*] (which is one millimeter divided into hundredths), place it under the lens and project the picture on the ground glass slide, adjust the focus and measure the size with an ordinary glass 100 millimeter measure *When one millimeter of the projected stage micrometer is equal to 10 millimeters on the glass measure, then the magnification equals 1000 diameter* [The italics are ours] Other magnifications are calculated in a similar manner"

As stated above, the book contains valuable material and may be useful to advanced students, but to the beginner and, indeed, to anyone who is not well prepared to detect mistakes and to remedy them it can only prove an untrustworthy guide The paper and print are excellent and the binding is just what that of a laboratory manual should be, but the photographic plates at the end are so badly inserted that they become detached immediately and consequently are very liable to be lost

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The American Year book of Medicine and Surgery Edited by GEO M GOULD, M D Illustrated London The Rebman Publishing Company 1899 Pp 1102. Price 38s

THIS enormous work is described as being "a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery, drawn from journals, monographs, and text-books of the leading American and foreign authors and investigators" The editor is fortunate in possessing a large and capable staff, amongst the members of which are some of the most distinguished medical men in the United States No pains have been spared in collecting the material and the result is a most valuable *résumé* of the principal work done in the various branches of medical science throughout the past year

The section on General Medicine is under the charge of Dr Alfred Stengel, physician to the Philadelphia Hospital, and Dr D L Edsall, physician to St. Christopher's Hospital for Children, Philadelphia Attention is drawn to the advances which have been made in the department of infectious diseases, stress being laid on the Widal test in typhoid fever which is characterised as "one of great

THE LANCET.

LONDON SATURDAY, APRIL 15, 1899

THE Lord Chancellor has introduced into the House of Lords a Bill entitled an Act to Amend the Pharmacy Act, 1868, which practically seeks to legalise company pharmacy Though the Bill contains nothing strictly medical in interest yet the powers which it proposes to confer upon trading companies to serve as pharmacists are well worth the attention of our readers As in the case of the Companies (Medical Profession) Bill with which we dealt in a leading article last week the title of the Pharmacy Bill and the Bill itself are a model of brevity The Bill has been introduced on the representations of the Council of the Pharmaceutical Society, but the spirit of these representations seems to have been completely ignored The Pharmacy Act, 1868 provides for the infliction of penalties on persons acting as chemists or druggists without being registered In a remarkable case which was decided by the House of Lords on July 22nd, 1880, it was ruled that the word "person does not include a corporation, and that consequently penalties for contravention of this provision of the Act cannot be recovered from a company A company cannot pass the examination required to qualify for registration as a chemist or druggist, but the new Bill would allow a company to carry on the business of a chemist or druggist on the condition that it employs a duly qualified manager or assistant—that is to say, it would place a company in a similar position to that of the executors or trustees of a deceased druggist, and would require that, subject to this provision, anything which would be an offence under Section 15 of the Pharmacy Act, 1868, if committed by an individual should be an offence if committed by a company The *principle* therefore which rules in the essential clause of the Companies (Medical Profession) Bill is completely reversed in the Pharmacy Act, 1899 In short, while it is to be unlawful for a company under the Companies Acts, 1862 to 1898, to carry on the profession or business of a physician, surgeon, dentist, or midwife, it is to be lawful for a company to carry on the business and use the description of a pharmaceutical chemist if and so long only as the business is conducted by a manager or assistant who is duly registered in accordance with the requirements of the Pharmacy Act, 1868

A greater blow to the status of the respectable profession of pharmacy could hardly have been dealt and if the Bill be passed all the commendable energy and zeal of the Pharmaceutical Society to raise the standing of those who dispense medicines and sell poisons will be lost Indeed, since the time when the Pharmaceutical Society was established in 1841 it has laboured most vigorously for a test of qualification, and in 1868 Parliament recognised the importance of registering a body of educated men such as are those who follow the practice of pharmacy The Lord Chancellor has amplified that provision in Section 16 of the Pharmacy Act which was framed on behalf of widows and which enables them to retain a hold on the businesses which their deceased husbands were qualified to conduct Exception may be taken to the suggestion in the memorandum to the Bill that the object of the Bill is to place a company in the same position as the executors or trustees of a deceased druggist, for it should be pointed out that the law insists that the executors of a deceased druggist must appoint a qualified manager Pharmacists would, we think, deplore the passing of this Bill, for it would plainly afford a mischievous precedent tending to drag down professional occupation to the level of mere trading The medical profession, we have no hesitation in saying, regards the pharmaceutical profession as a useful and honourable one which can only be properly conducted by men of enlightenment and knowledge who must be recognised as such and stamped by a qualification recognised by the State It seems to us that if this Bill should become law a company could "run" a hundred shops and yet retain the services of only one single qualified man to satisfy the requirements of the law Thus in 99 shops medicines could be dispensed and poisons sold by the unqualified, the inexperienced, and the ignorant The development of "companies" has of recent years been great Hence the pharmacist has found it expedient to add accessories to his business which require no legal qualification to enable him to sell them For example, tooth brushes, combs, and sponges, and a variety of other articles are, strictly speaking, outside the class of article which the pharmacist might be expected to sell Doubtless these accessories are a source of profit to him, but we cannot help thinking that if his work had been restricted to the dispensing and sale of medicines, for which the Pharmacy Act was designed to qualify him, the transaction of such a business would never have fallen into the hands of mere company promoters

We understand that it has been suggested that if the Lord Chancellor cannot see a way of preventing companies from interfering with pharmacy, he should insert a clause providing that all the directors of any such company should be qualified pharmacists Such a clause would seem to be fair and desirable

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WE have before us a bulletin issued by the Chicago Health Department on the treatment of diphtheria by antitoxin in that city from Oct 5th, 1895, to Feb 28th, 1899 The statistics are carefully given and the results obtained are certainly most remarkable and furnish some of the most powerful proofs of the success of the antitoxin treatment in diphtheria which have yet been published The records deal exclusively with the gratuitous treatment of patients suffering from diphtheria in the homes of the poor and destitute—those unable to pay a medical practitioner As these cases are reported to the Health Department they are at once assigned to the disengaged medical

LIBRARY TABLE

The Story of the British Race By JOHN MUNRO London Geo Newnes, Limited Price 1s —This book is one of a Library of Useful Stories issued at popular prices and it is written with the idea of popularising the science of anthropology Unfortunately, instead of putting into simple language the broad outlines of the difficult subject, the author has spent his ingenuity in describing the origin of the British race from a new standpoint and predicts for the results of his methods something like a revolution in the accepted mode of viewing ourselves He then attacks well-known authorities and substitutes what he calls a "cephalic index" as a crucial test of racial origin

Revue d'Hygiene et de Police Sanitaire Vol xxi, No 3 Paris Masson et Cie —Of the three chief articles in the March number of this review that in which Dr Ridolfo Livi deals with Vaccination and Variola in the Italian Army is perhaps the most interesting As one of the results of his investigation Dr Livi concludes that if the Italian army were composed, according to the views of the anti vaccinationists, of persons never vaccinated there would be, out of an effective mean of 207,000 men, no less than 6007 cases of small-pox per annum and an annual loss of 1156 men

JOURNALS AND REVIEWS

The Ophthalmic Review Edited by WILLIAM GEORGE SYM, M D Edin London J & A Churchill January and February, 1899 —This review which was for so long and so ably conducted by Mr Priestley Smith has now passed into the hands of Dr Sym with the same distinguished men as collaborateurs who aided Mr Priestley Smith, and in addition Dr W G Laws of Nottingham and Dr Charles H Usher of Aberdeen The first number for the present year contains an instructive article on Finding the Axis of Cylindrical Lenses, by Dr E E Maddox The second contains an article by Dr Victor Miller on Idiopathic Recurrent Intraocular Hæmorrhages Both numbers contain translations and notes

Recueil d'Ophtalmologie Janvier et Février Paris Alcan 1899 —The chief articles contained in these two numbers of M Galezowski's journal are one by M Galezowski himself on the Treatment of Trachoma, another by Dr Foveau de Courmelles on the Employment of X Rays in Ophthalmology, and a third by Dr F Ostwalt on a case of Traumatic Lesion of the Heart followed by Embolism of the Central Artery of the Retina

Edinburgh Medical Journal —The first article in the April number is by Dr Caton of Liverpool, the subject being the Prevention of Valvular Disease of the Heart Acute rheumatism is the most common starting point of this condition and as a preventive measure all Dr Caton's cases of rheumatism are clothed from head to foot in warm flannel during the whole of the acute period, kept in the most absolute rest in bed, and usually treated with gentle cholagogues and a salicylate preparation As soon as a cardiac bruit is perceptible he applies in the course of the third, fourth, fifth, or sixth intercostal nerve small blisters not much larger than a shilling, one at a time, with potassium or sodium iodide in addition to the salicylate In a clinical lecture on a case of typhus fever Professor Greenfield discusses disinfection and pleads for the increased application of bacteriological science to practical medicine Altogether there are eight original articles

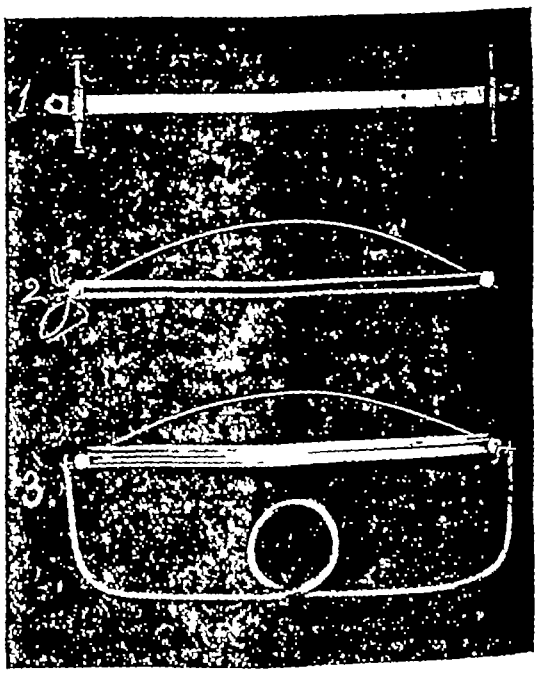
Scottish Medical and Surgical Journal —In the April number Dr J W Ballantyne (Edinburgh) publishes a long paper on the Present Position of the Pessary in Gynæcological practice He does not hold with those who condemn pessaries altogether, but takes the view that they are valuable in certain cases Dr G Lovell Gulland (Edinburgh) writes on Rapid Methods of Fixing and Staining Blood Films Wet films he fixes in a solution of a mere trace of sublimate in equal parts of absolute alcohol and pure ether, dried films in a mixture of formalin 10 parts and absolute alcohol 90 parts Copious details of the various processes are given.

Birmingham Medical Review —The original articles in the April number are on the Diagnosis between Supraphrenic and Subphrenic Pyopneumothorax, by Dr T S Short, on the Treatment of Tuberculosis, by Mr Lionel Stretton, and on the Spastic Paralyses of Children, by Dr W R Jordan. With regard to birth palsies Dr Jordan says that where there is no question of additional danger to the mother it is well to shorten as much as possible any labour which shows signs of being protracted, for the dangers of instrumental delivery are less than those of prolonged labour

New Inventions.

A METHOD OF RETAINING THE ORIGINAL STRENGTH OF LIGATURES AFTER BOILING

IF Chinese silk or green gut be sterilised by boiling in water in the ordinary way they become untwisted and lose much of their original strength If we avoid this untwisting by keeping them upon the stretch during the boiling the original strength of the ligature is maintained For this purpose the instrument figured below was made for me by Mr J Reynolds of Liverpool I have used it for about two years and find that I can boil Chinese silk or green gut in water repeatedly without any loss of strength The instrument consists of two parts, a



winder or spool and a handle The spool is a flat steel spring seven inches long, having at each end a cross-bar over which the ligature is wound, beyond each cross bar is a small eye (Fig 1) The handle is a piece of rigid bent wire which fits into the eyes in the spool and holds the spring bent ready to receive the ligature, this greatly facilitates the winding of the ligature upon the spool (Fig 3) When the ligature has been wound on the spool and the end fastened off the spring is released from the handle and is ready for boiling (Fig 2) I have found both silk and green gut prepared in this way most satisfactory

Liverpool. T B GRIMSDALE, M.B Cantab.

a similar investigation so as to test what is probably one of the greatest medical discoveries of the present century

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THE London Government Bill will probably be discussed next week by the House of Commons in Committee and the Government will have to consider which of the numerous amendments they will be prepared to accept That they will be willing to avail themselves of the experience of many men who have been personally engaged in the administration of local affairs we do not doubt and as a result possibly the Bill will be subjected to considerable modification before it becomes law

If we understand correctly the view of the Government it is that every effort shall be made to ensure that the representatives of district populations shall be better deserving of confidence than some of those who have recently controlled the local administrations Whether the opportunity of being styled mayors and aldermen will have this effect time alone can show, but these titles are, to our thinking, more likely to appeal to a class somewhat lower than that which we should prefer to see empowered to expend the ratepayers' money There is, however, no doubt that a considerable reduction in the number of representatives to be elected will enhance the prestige of each election, and this change alone is likely to bring into the field better candidates for municipal honours We should have been glad also if the Bill had been so drafted that the ratepayers could have changed the whole body of representatives every three years if experience of their action had shown this to be necessary

Among the provisions which we assume are intended to make service on the new metropolitan councils attractive is the privilege of exercising some of the powers of borough authorities, for example, the coveted power of promoting Bills in Parliament It is not probable that the Government will persist in this intention Whatever their size and rateable value the new boroughs must stand in many respects to the whole of London in the same position as the wards of the larger towns in England stand to the towns as a whole It would not be possible to confer such power on the wards of Liverpool or Manchester, and it will not, we are satisfied, in practice be found possible to confer such power on the municipal boroughs of London Especially would this prove impossible in the case of powers relating to the public health Utter confusion would arise if the laws which one borough council desired differed, perhaps in essential respects, from those which another borough council desired The London inhabitant, and especially the London tradesman, would be hopelessly bewildered as to the law which it was his duty to obey, and ignorance would in a short time be held to be excuse for disobedience. At the present time a number of town councils are promoting Bills in Parliament for insuring the purity of their milk supply Obviously any legislation for London in this and other health matters must be provided at the instance of a body representing the whole of the metropolis or the condition of law in London would become chaotic

On one question we do not anticipate any differences of opinion We refer to the necessity of the transfer of the duties of the Metropolitan Asylums Board relating to notification of infectious disease and to hospital provision to the London County Council It is obvious that these duties are a part of the public health administration of London and that their dissociation from the authority which appoints the medical officer of health of London and contributes to the salaries of the medical officers of health of London districts is an element of weakness in London administration Such change would imply no want of confidence in the managers of the Metropolitan Asylums Board It is a change inevitable if London is to be provided on any reasonable system with a more complete administration, and certainly without this change London is given less opportunity of guarding itself against disease than are all other large towns Fortunately the time is now ripe for such a change, for the London County Council has demonstrated its administrative capacity in matters affecting the public health

The Government have no easy task in designing a health administration which while leaving the responsibility of the carrying out of many important duties to the borough councils shall yet ensure the maintenance of the principle that for health purposes the London population is one The need of some central control has been long felt and the Local Government Act of 1888 and the Public Health Act of 1891 did much to provide what was necessary Before the Public Health (London) Bill was drafted Mr RITCHIE took into his counsel the several metropolitan district authorities and the London County Council It does not appear that Mr BALFOUR has followed this example and we cannot but believe, if it is not too late, that he would do well to invite the opinions of those who might help him to solve this difficult problem

We have already expressed our expectation that the Bill which is now before Parliament will render useful service to London from a sanitary point of view If it were amended in the sense which we indicate we believe that its usefulness would be assured for one weak point which it now possesses is that it fails to provide a public health administration sufficient for the requirements of London.

Annotations.

"Ne quid nimis."

THE TUBERCULIN TEST AND HER MAJESTY'S HERD OF DAIRY COWS AT WINDSOR

THE value of tuberculin as a diagnostic agent in the detection of tuberculosis has received striking confirmation by an experiment carried out at Windsor The herd tested belonged to Her Majesty and consisted of 40 non-pedigree cows, mostly Shorthorns and Jerseys. At a meeting of the Society for the Prevention of Consumption and other Forms of Tuberculosis, held at Marlborough House on Dec 20th, 1898, H.R H the Prince of Wales mentioned that Her Majesty had given permission for 36 cows from her home farm to be destroyed because they had been found to react after testing with tuberculin. Official sanction has now been given to the publication of the full details of the experiment in question The 40 cows forming the herd were all in good condition and apparently

inspectors nearest the respective localities so that no time may be needlessly lost in reaching any patient—and this by night as well as by day If the clinical symptoms point to a diagnosis of diphtheria the antitoxin is administered at once without awaiting confirmation by bacteriological cultures To quote the words of the report "The patient, rather than the disease, receives the benefit of the doubt" Before the practitioner leaves the case and before local treatment to the throat has been commenced specimens are taken for immediate bacteriological examination Only those cases which are by this means verified as true diphtheria by the identification of the Klebs Löffler bacillus and which are treated throughout by the inspectors of the department enter into the official records These precautions add greatly to the value of the statistics, the accuracy of which is practically unassailable

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A diagram is given in the bulletin showing the contrast between the mortality in diphtheria before and after the introduction of the antitoxin treatment During the 10 years prior to the treatment—from 1886 to 1895—there were 14,175 deaths from diphtheria, a yearly average of 1417, while during the subsequent three years of antitoxin treatment there were only 2552 deaths, a yearly average of 851 Thus, without regard to any change in population there were absolutely 566 fewer deaths from diphtheria during each year of the last three years than the average number of deaths from the same disease during the preceding 10 years. It should be added that the above figures also include those cases in which death was certified to be due to "croup" The method of treatment adopted by the Health Department of Chicago has certainly afforded the best results yet published as regards the use of antitoxin in diphtheria We have already alluded to the points which seem to us to be most worthy of notice, especially the use of the remedy in all cases which clinically resemble diphtheria, without waiting for a corroboration of the diagnosis by bacteriological cultures The antitoxin appears to be quite harmless when administered with due antiseptic precautions, and as the successful results are in direct proportion to the stage in which the antitoxin is given—the earlier the stage the more likely the cure—it certainly seems sound practice to use it in the manner described in the bulletin The system of notification so admirably carried out has been the means of presenting the medical world with a very complete series of statistics, and it would be most instructive if other municipal bodies would arrange for

a similar investigation so as to test what is probably one of the greatest medical discoveries of the present century

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THE London Government Bill will probably be discussed next week by the House of Commons in Committee and the Government will have to consider which of the numerous amendments they will be prepared to accept That they will be willing to avail themselves of the experience of many men who have been personally engaged in the administration of local affairs we do not doubt and as a result possibly the Bill will be subjected to considerable modification before it becomes law

If we understand correctly the view of the Government it is that every effort shall be made to ensure that the representatives of district populations shall be better deserving of confidence than some of those who have recently controlled the local administrations Whether the opportunity of being styled mayors and aldermen will have this effect time alone can show, but these titles are, to our thinking, more likely to appeal to a class somewhat lower than that which we should prefer to see empowered to expend the ratepayers' money There is, however, no doubt that a considerable reduction in the number of representatives to be elected will enhance the prestige of each election, and this change alone is likely to bring into the field better candidates for municipal honours We should have been glad also if the Bill had been so drafted that the ratepayers could have changed the whole body of representatives every three years if experience of their action had shown this to be necessary

Among the provisions which we assume are intended to make service on the new metropolitan councils attractive is the privilege of exercising some of the powers of borough authorities, for example, the coveted power of promoting Bills in Parliament It is not probable that the Government will persist in this intention Whatever their size and rateable value the new boroughs must stand in many respects to the whole of London in the same position as the wards of the larger towns in England stand to the towns as a whole It would not be possible to confer such power on the wards of Liverpool or Manchester, and it will not, we are satisfied, in practice be found possible to confer such power on the municipal boroughs of London Especially would this prove impossible in the case of powers relating to the public health. Utter confusion would arise if the laws which one borough council desired differed, perhaps in essential respects, from those which another borough council desired The London inhabitant, and especially the London tradesman, would be hopelessly bewildered as to the law which it was his duty to obey, and ignorance would in a short time be held to be excuse for disobedience. At the present time a number of town councils are promoting Bills in Parliament for insuring the purity of their milk supply Obviously any legislation for London in this and other health matters must be provided at the instance of a body representing the whole of the metropolis or the condition of law in London would become chaotic

On one question we do not anticipate any differences of opinion We refer to the necessity of the transfer of the duties of the Metropolitan Asylums Board relating to notification of infectious disease and to hospital provision to the London County Council It is obvious that these duties are a part of the public health administration of London and that their dissociation from the authority which appoints the medical officer of health of London and contributes to the salaries of the medical officers of health of London districts is an element of weakness in London administration Such change would imply no want of confidence in the managers of the Metropolitan Asylums Board It is a change inevitable if London is to be provided on any reasonable system with a more complete administration, and certainly without this change London is given less opportunity of guarding itself against disease than are all other large towns Fortunately the time is now ripe for such a change, for the London County Council has demonstrated its administrative capacity in matters affecting the public health

The Government have no easy task in designing a health administration which while leaving the responsibility of the carrying out of many important duties to the borough councils shall yet ensure the maintenance of the principle that for health purposes the London population is one The need of some central control has been long felt and the Local Government Act of 1888 and the Public Health Act of 1891 did much to provide what was necessary Before the Public Health (London) Bill was drafted Mr RITCHIE took into his counsel the several metropolitan district authorities and the London County Council It does not appear that Mr BALFOUR has followed this example and we cannot but believe, if it is not too late, that he would do well to invite the opinions of those who might help him to solve this difficult problem

We have already expressed our expectation that the Bill which is now before Parliament will render useful service to London from a sanitary point of view If it were amended in the sense which we indicate we believe that its usefulness would be assured, for one weak point which it now possesses is that it fails to provide a public health administration sufficient for the requirements of London.

Annotations.

"Ne quid nimis."

THE TUBERCULIN TEST AND HER MAJESTY'S HERD OF DAIRY COWS AT WINDSOR

THE value of tuberculin as a diagnostic agent in the detection of tuberculosis has received striking confirmation by an experiment carried out at Windsor The herd tested belonged to Her Majesty and consisted of 40 non-pedigree cows, mostly Shorthorns and Jerseys At a meeting of the Society for the Prevention of Consumption and other Forms of Tuberculosis, held at Marlborough House on Dec 20th, 1898, H.R H the Prince of Wales mentioned that Her Majesty had given permission for 36 cows from her home farm to be destroyed because they had been found to react after testing with tuberculin Official sanction has now been given to the publication of the full details of the experiment in question The 40 cows forming the herd were all in good condition and apparently

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Vitality—Although the collaterals (brothers and sisters) of epileptics show a larger number per family than the average, yet their vitality is lower and a larger number of deaths occur among them than in ordinary families Thus of the 245 collaterals of 40 epileptics 140 were alive and 105 were dead Among the 105 deaths were three miscarriages, 75 deaths in the first decade of life, 16 in the second decade, five in the third, and six in the decades above the third This mortality, compared with that of normal families, shows an increased ratio of one-third above the normal for all ages up to 20—i e, for every three deaths in ordinary families there are four deaths in epileptic families 5 *Morbidity*—Among the parentage (including uncles and aunts) of epileptics Dr Bechet finds a predominance of pulmonary affections and particularly of phthisis, while neuroses and insanity are remarkably rare among them The children of epileptics, on the other hand, suffer abundantly and frequently from convulsions and meningitis The general conclusions drawn are as follows (*a*) Duration of life or longevity is sensibly less among the antecedents of epileptics than that which normal families present (*b*) Epileptics belong generally to large families, they have many brothers and sisters, but, on the other hand, they are not themselves able to beget large families, epileptics tend to sterility (*c*) Epileptic families have a lower vitality than normal families (*d*) The morbidity in the ancestry and issue of epileptics takes a special form, pulmonary diseases, and especially phthisis, being common in the parentage, while cerebral affections, and meningitis in particular, are commonly found among the children of epileptics, insanity proper is rare in epileptic families

FERMENTATION WITHOUT YEAST CELLS

HITHERTO it has been generally admitted that when the yeast cells are introduced into a solution of sugar they begin to grow and to multiply by gemmation new cells budding off from the old ones with wonderful rapidity In the act of growth the sugar is broken up into alcohol and carbon dioxide though the presence of small quantities of succinic acid and some other substances indicates that the decomposition which occurs is more complex than at first sight appears Some important researches have been recently made by Dr Wróblewski of Cracow which demonstrate that the cells contain a ferment or enzyme and that the splitting up of the sugar molecule is not dependent upon the growth of the cells Dr Wróblewski triturated some yeast so that the cells were completely broken down and then subjected the mass to a pressure of 300 atmospheres The fluid thus obtained possessed a very feeble fermenting power Quite fresh *ground* yeast was pressed dry with a pressure of from 50 to 75 atmospheres, a kilogramme of this was triturated with 750 grammes of sea sand and 75 grammes of flint powder till the mass was tough and doughy A pressure of 300 atmospheres was then applied to it and (after filtration) a clear fluid was obtained from it This juice, mixed with an equal volume of a 60 per cent solution of cane sugar, started active fermentation in from 10 to 20 minutes Microscopical examination showed very few isolated yeast cells so few, indeed, that it was hardly possible that they could be the active agents, especially in so concentrated a fluid. The fluid obtained by pressure from *surface* yeast possessed but little fermentative power, though it frequently contained a large number of yeast cells Slight increase of temperature, as, for example, the heat of the hand caused considerable increase in the activity of the fluid obtained by pressure of *ground* yeast so that disengagement of gas was observed to take place more actively than elsewhere in that part of a long test tube which had been grasped by the hand Chemical examination of the yeast juice showed that it contained numerous substances in solution belonging to the proteids, coagulating at 41°, 51°, 56°, 59°, 62°, and 68° C It also contains globulin, mucin like bodies, proteoses, peptone, nucleo-albumin, a carbohydrate, a peculiar crystallisable substance containing much phosphorus, tyrosin, leucin, glutaminic acid, nitrogenous bases, xanthin—a substance which converts sulphur into sulphuretted hydrogen and iodine into iodurétted hydrogen—glycerine, calcium and magnesium phosphates, peculiar volatile substances, and several others There are also some ferments, especially invertin and zymase When the juice was heated to from 40° to 41° C it lost its fermentative power and Dr Wróblewski considers it to be not improbable that an albumin is present which is identical with the zymase The statements of Dr Wroblewski support those already made by Frau Marie von Manassein and von Buchner that sugar can ferment without yeast cells and lead to the conviction that alcoholic fermentation is effected by the agency of a chemical substance or at least by chemical agents Buchner has named this substance zymase and associates it with the enzymes Dr Wróblewski regards in like manner fermentation as a chemical process and as performed by chemical agents The zymase which splits up sugar differs from the enzymes both in its reaction and in its properties It is inoperative at 40° C and has very feeble osmotic power It must be placed amongst Ostwald's catalytically acting bodies upon the precise behaviour of which we need much more light

THE ROYAL BERKSHIRE HOSPITAL

A SPECIAL court of the governors of this institution was held on April 4th to consider the report of the special committee, to which we alluded in our issue of April 1st The proposed new rule concerning the annual re election of the medical staff was carried with some important alterations First, the annual re-election is to apply only to the acting medical staff, and, secondly, if any member be not re-elected the decision must be confirmed "at the next annual court or at a special court to be convened for the purpose" Thirdly, this new rule is only to apply to elections after April 4th, 1899 We think that these alterations are much for the better The making it necessary for the non election of any member of the staff to be confirmed by a future court will give the member in question an opportunity of defending his position should he so desire Moreover, it will be seen that, as we urged in our previous comments on the subject, the new rule is not to be retrospective Mr O C Maurice tendered his resignation, which was accepted with great regret, but we are glad to see that he was unanimously elected as consulting surgeon Mr Maurice has been connected with the Royal Berkshire Hospital for nearly forty years and, to quote the words of Major Thoyts, a governor of the hospital, "everyone knew how much the institution was indebted to him" It was decided that in future the post of physician to the hospital should be held only by a graduate in medicine of a university of Great Britain or Ireland not practising surgery

THE DESTRUCTION OF REFUSE

THERE remains now absolutely no excuse for our sanitary authorities to dump" down household rubbish, market refuse, and the like on low lying grounds with the view of raising the level and to make them suitable (?) for building purposes. The complete destruction of all sorts and conditions of refuse has now been accomplished in a manner to satisfy even the most exacting sanitarian as well as the economical mind The difficulties of effectually destroying a heap of material comprising tin pots, cabbage stumps, spent tea leaves, and cinder ashes

healthy They were all tested and were under the care of Mr Allnutt and Mr Tennant, veterinary surgeons, of Windsor The tests were carried out on Sept 16th and 17th, 1897, and the temperatures of the cows were taken on Sept 14th by Mr Tennant when with the exception of one cow in which the temperature was 104° F all the cows had temperatures under 103° The test was commenced on Sept. 15th, the temperature of each cow being taken just before injection and at the third, sixth, ninth, twelfth, and fifteenth hour afterwards At least 32 cows appeared to be tuberculous, their temperature rising to 104° or more, five cows appeared to be healthy, and three were doubtful The whole herd was killed and the carcasses were examined at the Royal Veterinary College Of 34 animals whose temperature had risen above 104° 33 were found to be tuberculous The remaining animal was not tuberculous but had a diseased uterus The rise in this case was sudden and did not occur until after the twelfth hour Of four cows which did not react three were found to be free from tubercle and the fourth had one small caseous gland in which tubercle bacilli were found The two remaining cows which were classed as "doubtful" were both found to be tuberculous Professor J McFadyean, from whose paper in the *Journal of Comparative Pathology and Therapeutics* we take these details, points out that the herd experimented upon might reasonably have been supposed to be free from tuberculosis as the cows were living under the very best conditions There is only one way of keeping housed cattle free from tuberculosis, says Professor McFadyean, and that is to see that no tuberculous animal is admitted among them This plan, we are glad to see, has been adopted in the formation of the new dairy herd at Windsor, all animals purchased for it being tested and admitted only when they do not react It will be seen that a rise after the injection of tuberculin is not proof positive of the existence of tuberculosis, since one cow which reacted had no tubercle but suffered from a diseased uterus But in a very large proportion of cases a rise was practically pathognomonic

ANOTHER VICTIM TO QUACKERY

THE adjourned inquiry into the death of Mrs Elizabeth West, the wife of a furniture dealer at Southend, was concluded on April 3rd before Mr Edgar Lewis, the coroner for South Essex The deceased had been attended by a "lady doctor" calling herself "Madame" Comber The husband in the course of his evidence stated that "Madame" Comber had first attended his wife about ten weeks previously His wife had told him that "Madame" had made a most miraculous cure "Madame" told him that his wife was suffering from the displacement of an internal organ and a certain obstruction which must be removed Afterwards "Madame" Comber said that she had put the displacement right She told him that she was certified and had surpassed many medical men "Madame" Comber gave evidence and said that her husband was a carpenter now in the Islington Workhouse In answer to a question put by the coroner, "How do you describe yourself?" she replied "Well, as a chemist or a nurse and do anything that is handy" As far as she knew she was on the register as a chemist She had heard of peritonitis but did not know what it meant She could not diagnose any disease In her opinion immediate danger meant when a person was "struck for death" Dr Avery Clough Waters said that the deceased died with symptoms pointing to acute peritonitis The treatment had been inadvisable but he could not say that it had accelerated death A verdict of "Death from natural causes" was returned and the coroner was requested to censure "Madame" Comber This he accordingly did, telling her that she had narrowly escaped being committed for manslaughter He disallowed her expenses He said that should she ever come before him again she might not get off so easily To our minds when an absolutely ignorant quack talks about rectifying displacements and removing obstructions and when, moreover, a woman in whom she claims to have put a displacement right dies from peritonitis, the case assumes a very serious aspect "Madame" Comber may have done and very likely did do nothing, but she said that she did and that is quite enough to condemn her

ON THE ANCESTRY, COLLATERALS, AND DESCENDANTS, OF EPILEPTICS

THE study of the hereditary antecedents of nervous diseases has occupied much attention during the past decade and this branch of investigation combined with sociological study has done much to elucidate our knowledge concerning the origins and modes of transmission of many nervous and mental disorders The most important work in this direction relates to the neuroses and psychoses connected with alcoholism, epilepsy, and general paralysis of the insane and has emanated largely from the French school Dr Gaston Bechet, in the *Archives de Neurologie* of March, 1899, gives us a careful study of the antecedents, collaterals, &c., of epilepsy, basing his work on the minute study of 40 families, epileptic members of which had come under observation at the Ville-Evrard Asylum, France The facts are arranged among various headings as follows 1 *Longevity*—Among the 135 grandparents of 40 epileptics of whom a definite and trustworthy history could be obtained 130 had died at the average age of 69 and five were still alive at an advanced age The respective ages and numbers of those deceased were distributed as follows —

Age (deceased)	Total number male and female (deceased)
Above 90 years	7
80-90 "	28
70-80 "	54
60-70 "	19
50-60 "	11
40-50 "	6
30-40 "	5

Of the 80 parents (of the 40 epileptics observed) 37 were alive and 42 were dead, while one was untraced Of those deceased 25 male parents died at the average age of 55 years, and 17 female parents at an average age of 45 years Of those living 14 males averaged 61 years and 23 females averaged 59 years Comparing these numbers with those relating to normal families studied by Ball and Regis (in *l'Encéphale*, 1883) it is shown that while the average age at death of parents of normal families is 57 years, that of parents of epileptic families is 50 years—a decidedly diminished longevity 2 *Antecedents and collaterals*—The 40 epileptic patients had 305 members as the sum total of their parents, uncles, and aunts, while of collaterals (brothers and sisters) they had in all 205, which added to the 40 patients gives 245 children for 40 families, or an average of 6 11 children per family, a number which is pointed out to be decidedly above the average of ordinary families in France "Epileptics belong to families of more than average fecundity" is Dr Bechet's conclusion 3 *Descendants*—On the other hand epileptics themselves beget but few children Thus, of the 40 patients 26 were married—14 being celibate—and had issue The latter, however, comprise only 30 children, or an average of 1 16 per family, a considerably smaller percentage than that of corresponding normal families, which is given as 2 73 by Ball and Regis. Dr Bechet concludes that "the reproductive power of epileptics is small, it is essentially less than that of ordinary (non epileptic) families, in short, epileptics tend towards sterility,"

concludes (a) that the stereognostic sense is due to a complex sensory perception starting in the parietal lobe of the brain and spreading thence into some higher centre ("apperception centre"), (b) that peripheral disturbances in the nerves may lead to loss of isolated elements—tactile, thermal, &c —of the stereognostic sense, and (c) that the higher "apperception centre" may also be disturbed in severe cerebral injury—e g, apoplexy—and that in such cases the stereognostic sense may be lost even though all the individual sensations of skin and limb are preserved The thesis is important and in view of the fact that experimental evidence goes to show that in dogs the tactile sensibility of the limbs is located in the area around the crucial sulcus (Luciani) and that the same area practically contains the memories of muscular movements (Hitzig), and, further, in regard to the fact that Bastian has brought the most cogent evidence for the "kinæsthetic" functions of the Rolandic area in man, and having regard also to the fact that local lesions of the same area produce errors of the sense of tactile localisation (Horsley), and that slight faradaisation of the same can give rise to cutaneous sensations and feelings of movements, referred to the hand, arm, &c (Dana, Ransome), it follows that many functions are represented in the Rolandic area, and Dr Sailer's study serves to throw further light on the functions of this region of the brain the practical importance of which is undeniable in the diagnosis and study of cerebral disease

A MEDICAL ARCHÆOLOGIST

MR. JOSEPH STEVENS of Reading, who died in that town on April 7th at his residence in the Alexandra road, was a good example of the successful combination of medical work with other fields of mental activity Born in Berkshire in 1818 he studied medicine at the Middlesex Hospital, became qualified as M R C S Eng in 1843, and as Ext. L.R.C P Lond and L S A. in 1844, and forthwith commenced practice in St Mary Bourne, a village near Andover The situation was an ideal one for an archæologist, presenting opportunities which Mr Stevens utilised by forming collections of palæolithic implements, neolithic implements, and fossils, which in course of time were deposited in the museum at Reading He was, however, much more than a mere collector of curiosities Imbued with a love of his subject and well acquainted with the results obtained by other workers in the same field, he was a frequent and valuable contributor to the literature of archæology and natural history His writings of this class include "Geological Notices of North Hampshire," 'The Flint Works at Cissbury," "Discovery of Pit Dwellings at St Mary Bourne,' "Sarsens Greywethers or Druid Stones' and "Roman Remains recently discovered at Preston, Sussex." About twenty years ago he retired from practice and removed to Reading, where he held the office of curator of the local museum and made many further contributions to the literature of archæology Mr Stevens was widely known and his death is lamented by numerous friends His high reputation procured for him the membership of various scientific societies and he was moreover on the council of the British Archæological Association

AN UNFORTUNATE PRESCRIPTION

LAST October Dr Fred H Brennan, a qualified medical man holding diplomas obtained in Ontario at least 12 years ago and practising in Johannesburg, was arrested on a charge of culpable homicide The allegation was that a Mrs Robinson had died from strychnia poisoning after taking a mixture prescribed by him and dispensed by the now extinct Speer Medical Company, of which he was medical officer The patient suffered from psoriasis and anæmia, and the prescription, as printed in the *Johannesburg Weekly Star* of March 11th, contained "Liq As" one ounce, and "Liq Strychn" five drachms, together with water to make up six ounces, the dose being half a teaspoonful It seems that prescriptions in these terms were frequently written by Dr Brennan and made up on the company's premises without ill effects ensuing Mrs Robinson, however, was seized with fatal convulsions and her death was attributed to the dispenser having made up her medicine with alkaline liquor arsenicalis instead of acid liquor arsenici hydrochloricus, so that a sediment was formed consisting mainly of undissolved strychnia The danger of such a combination has already been pointed out in THE LANCET of Feb 11th, 1899 (p 393), in an annotation relative to this case. The trial took place before Mr Justice Morice and a burgher jury, occupied five days, and terminated on March 8th in a verdict of acquittal It was stated that the medicine was made up by a legally qualified dispenser and on this ground the judge directed the jury that the accused was not responsible for the misuse of the alkaline solution Of course, a charge of culpable homicide was quite out of proportion to the offence The case was obviously one of misadventure to which the accused was an accessory, and it painfully illustrated the obligation which rests on all prescribers to avoid the use of ambiguous abbreviations and to be very precise when ordering poisonous drugs

THE PREVENTIVE TREATMENT OF BERI-BERI

"HAVING had occasion to observe at Chantaboun during the month of September, 1898, an epidemic of beri beri, short since it lasted only a few weeks, but intense since out of 260 tirailleurs forming the garrison it struck 53, causing 10 deaths, we saw it—whilst still at the height of its intensity, the two days preceding having given us nine new cases—suddenly cease within 48 hours under the influence of a modification of the alimentary regimen consisting in an abundant distribution of fatty matters to an entire group who did not consume any previously" The foregoing is a literal translation of the opening paragraph in an article which appears in the *Archives de Medecine Navale* for March, 1899, the author being Dr L Laurent, a junior medical officer attached to the French army of occupation in Siam The presumption that fatty food is a prophylactic against the disease seemed to be strong but, as it happened, further confirmation was at hand "A few weeks later at Poulo-Condore," continues Dr Laurent, "a second epidemic—very much longer and more serious since in a year it had made upwards of 360 victims—ceased in the same sudden fashion under the influence of a similar regimen when applied to the convicts in this penitentiary establishment by our comrade, Dr Andrieux In the one case as in the other from the moment the fat-containing regimen was given to individuals still in health not a single fresh attack manifested itself among them and the epidemic could be regarded as definitively terminated." It was from the lectures on exotic pathology which were delivered by Dr Brémaud in 1892-93 that Dr Laurent derived his inspiration According to Dr Brémaud beri beri is a dyscrasia of alimentary origin, being due to the deficiency, partial or complete, of fatty ingredients in the food and occurring in hot climates much in the same way as scurvy occurs in temperate regions when there is deprivation of meat and fresh vegetables Dr Brémaud's views were purely theoretical, as he never had had the chance of practically verifying them, but now (exclaims his disciple) they have received "experimental consecration" Dr Laurent, however, is careful to add that he does not attribute an exclusive role to the deprivation of fatty matters in the genesis of beri beri Many factors have to be considered,

have been very great, but these difficulties have been removed chiefly by paying attention to the fact that the heat of combustion must be maintained if complete destruction is to be secured Lord Kelvin, in conjunction with Professor Barr, has recently been investigating the question and his conclusions are interesting and very assuring He points out that with properly constructed plant no inconvenience whatever need be caused The absence of smoke is ensured, while the complete destruction of organic matter is secured when attention is paid to the proper construction of the furnace Further, destructors may be located in populous districts without danger to health or loss of comfort and thus the expense of cartage may be reduced to a minimum while the inconvenience which must arise if all the refuse from a large district be taken along one thoroughfare to a destructor in the outskirts may be avoided The problem of refuse destruction, indeed may be counted as solved, especially when we consider that it is possible to destroy the whole of the carcass of a horse without offence and of immense quantities of paper without the escape of charred particles or ash from the chimney shaft Since this is so, we think that it should be obligatory on the part of all of our sanitary authorities to adopt destructors and to abandon the hideous, unsightly, and disease-dealing method of dumping rotting and offensive refuse on the nearest waste space

ELECTRIC CONDUITS A POSSIBLE CAUSE OF THE SPREAD OF DISEASE

THE electric light in our houses is a delightful luxury, but it is not certain that while the electric companies pay every attention to the insulation of their cables and "leads" they bear in mind certain other conditions which are none the less essential to the health and comfort of the householder A correspondent points out, for example, that in the town where he lives the main cable supplying the current is laid in a four inch pipe beneath the public footpath with branch pipes for house connexions the ends of which are left open The higher temperature inside the houses induces an indraught of air by these open pipes and, as different houses vary in temperature and these pipes form a direct communication from house to house, so there is a circulation set up between one house and another, the current of air varying in velocity according to the range of temperature In the case of houses warmed throughout by a hot-water system the temperature may be as much as 25° F higher than the external air, a condition which causes an influx of air of sufficient velocity to blow out a candle flame In this way the infected air of a house where infectious disease is present might easily be drawn into other houses with serious results The conveyance of small pox by aerial agency is established, and it is conceivable that it could be conveyed from one house to another in the manner just suggested There is the possibility of other contagious diseases being spread in the same way The preventive measure is clear the pipes should be plugged with insulating material so as to stop the intercommunication of the atmosphere between one house and another

THE NOTIFICATION OF INFECTIOUS DISEASES

THE fact that the Notification Act (Extension) Bill has been read a second time in the House of Commons at least makes it possible that there will be legislation on the subject during the present session We think that the Members of Parliament who have backed the Bill have done wisely in not including in the Bill other amendments of the existing law than those for which it provides until it was known that the House of Commons had no objection to the principle that the requirement as to notification should extend to all parts of England and Wales But while this is the case we should be glad if opportunity occurred to test the feeling of the House on the question of one or two amendments which would make notification of much wider use than it can be under the existing law Hitherto, except in London, notification has been too much regarded as providing material for administrative use only in the comparatively small areas of urban and rural districts Its possible use to county authorities and its larger use to the country as a whole are not contemplated in the present law We would gladly see the Bill amended in this larger sense and supported by the Government We do not believe that any desire would be shown by members of either House to limit the usefulness of a system which has been increasingly shown to be necessary for the safeguarding of the health of the vast population of this country

THE STEREOGNOSTIC SENSE AND ITS IMPAIRMENT IN BRAIN DISEASE

DR JOSEPH SAILER, in a recent publication,[1] makes a contribution to the study of this sense—the sense of form and solidity Excepting Hoffmann[2] no medical writer, he says, has seriously studied this sense, and the standard text-books of Gowers, Oppenheim, Mills, &c, do not specially mention it nor is it dealt with by Laehr in his special studies on sensory phenomena The case recorded is that of a man, aged 53 years, who was admitted to the *Philadelphia Hospital for hemiplegia* in February, 1897 He had a history of alcoholism and the hemiplegia followed upon apoplexy He improved considerably after a while but the left arm was permanently paretic, the hands and fingers showing a slight contracture The tendon reflexes were exaggerated On testing it was found that the simple tactile sense was present in the affected limb but localisation of light contact was very inaccurate If the hand was touched the patient would indicate a point two inches away from the point touched, if one of the fingers was touched he was unable to recognise which one, upon the forearm he usually indicated a point about an inch above the point touched Temperature sense was completely lost in the hand and markedly so in the forearm Above the elbow both thermal and tactile senses were correctly indicated The "muscular sense" was lost in the hand and neither a slight nor a considerable alteration in the position of the fingers appeared to be perceived The same was true of the wrist-joint, at the elbow, however, conditions of flexion, &c, were correctly recognised, though an occasional mistake was made In the majority of instances the patient was unable to distinguish between hard and soft objects placed in the hand, and he had no perception of their shape, yet the same objects placed in the right hand were recognised at once The sensory failures in the left lower limb were similar to those in the left arm The knee-jerk was greatly increased and there was ankle clonus, the left leg was paretic, but the patient could walk with the aid of a stick There was inequality of the pupils with left hemianopsia which disappeared to a great extent Analysis shows that simple tactile sensibility, localisation of tactile points and areas, the pressure sense, the temperature sense, and the sense of the position of the fingers and limbs, all contribute to form the "stereognostic" sense, the most important factor being the recognition of pressure and of position (space sense) Dr Sailer quotes cases recorded by Wernicke and von Monakow,[3] Burr, and Olmstead,[4] of similar phenomena in hemiplegia He

[1] Journal of Nervous and Mental Disease, March, 1899
[2] Vide Möbius: Diagnostik der Nervenkrankheiten Leipsic, 1894
[3] Gehirn Pathologie, 1897
[4] Journal of Nervous and Mental Disease, January and November 1898.

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(Continued from p 972)

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"THE CHEMISTRY OF SAUSAGES"

WITH reference to the remarks published under the above heading in our issue of April 8th a lurid light is thrown upon the composition of these "delicacies" by a trial held at Dover on April 7th of a butcher's agent for overcrowding cattle In one case a cow was found to be in such a bad condition on its arrival at Dover from Ashford that it had to be killed there and then According to the report in the *Daily Chronicle* the carcass, which was stated to be one mass of bruises and to show a great amount of congealed blood under the skin when this was removed, was sent to the local sausage factory We earnestly hope that the sanitary authorities of Dover will keep an eye upon the local sausage factory The magistrates held that cruelty was not proved against the prisoner, which doubtless was the case, but it is pretty obvious that someone had been cruel and also that if the local sausage factory is allowed to go on its career unchecked several people will run a fair chance of being poisoned

A SANATORIUM FOR PHTHISICAL PATIENTS AT THE CAPE

DR OSCAR LEVY writes to us to draw attention to a new sanatorium recently promoted at Harrismith in the Orange Free State It is claimed, says Dr Levy, that Harrismith possesses exceptional climatic advantages, such as dryness, a sunny sky, elevation, and bracing climate An account of the district sent out by a layman interested in the scheme states

The town has a very excellent water supply The main part of the sanatorium is to be erected against the side of a hill, 5400 feet above the sea and about 25 minutes' walk from the town in a well sheltered position Barely three miles from that spot and just near to the town there rises the great Platberg It has an altitude of almost 8000 feet above the sea The summit of this mountain is in extent about three and a half English square miles Owing to the peculiar formation of the mountain its summit has likewise a splendid water supply On this mountain or near its summit lightly constructed summer houses are to be erected for the patients In the same district is another mountain where at an elevation of not far from 10,000 feet a second summer house might be established later This last-mentioned mountain, notwithstanding its elevation of over 11,000 feet, keeps free from snow All these localities are situated in such a manner that they experience almost always the same weather By this circumstance and the difference in the height of these sites a very excellent opportunity would be given for observing more especially the effects of altitude on the disease

The promoters of the scheme state candidly that they are not medical men, but they are desirous of obtaining the opinions of the profession on the scheme All we can say is that if the climatic conditions are really such as are put forward in this prospectus, then the district should be eminently fitted for a sanatorium

THE MIDWIVES BILL.

THE Bill for the Registration of Midwives came on somewhat unexpectedly on Wednesday evening when Mr Tatton Egerton moved the second reading, stating his belief that the Bill had received the acceptance of the medical profession Mr T P O Connor moved the adjournment of the debate on the ground that the measure was of too great importance to be discussed at so late an hour in the afternoon, while he denied that the medical profession was unanimous in favour of it The Speaker declined to accept the motion as the debate was due by rule to be adjourned in a few minutes, and Sir William Priestley, who is understood to be a supporter of the measure, talked it out

MULTIPLE AMŒBIC ABSCESS OF THE LIVER WITHOUT DYSENTERY

IN the "Proceedings of the Philadelphia Pathological Society" of January Dr Joseph T Buxton has recorded an instance of multiple amœbic abscess of the liver without dysentery—a case of some importance since Dr Lafleur, writing in Allbutt's "System of Medicine," declares that "amœbic abscess of the liver must for the present be considered as invariably secondary to active or latent amœbic dysentery" A woman, aged 41 years, was admitted to hospital Her chief complaint was of weakness and tenderness in the right side of the abdomen Four weeks previously she began to grow weak, her appetite failed, and she was exhausted on the least exertion At times there was nausea after eating The bowels were loose during the whole illness No history of dysentery could be elicited. The patient was emaciated The skin had a peculiar dirty and yellow appearance and was a little cyanosed The conjunctivæ were somewhat icteroid The tongue was dry and parched and was covered with a brownish fur The pulse was rapid and thready The abdomen appeared to be distended Liver dulness began at the fourth space and extended two fingers' breadth below the level of the umbilicus The right lobe was distinctly palpable and irregular, the surface was smooth and tender at points The left lobe could not be felt and was not tender The feet were œdematous and there was albuminuria On the third day after admission abdominal tenderness was much more marked and more general and the area of hepatic dulness had increased, extending to the crest of the ilium The edge of the left lobe could now be felt extending about two fingers' breadth below the costal margin A nodule could be felt upon the surface of the right lobe The bowels were regular and the stools were normal On the fifth day tenderness was extreme over the left lobe of the liver which now extended four fingers breadth below the costal

margin. The pulse was weak and rapid and respiration was laboured. On the sixth day a little blood was vomited with food the body was cold and cyanosed and the patient died. At the necropsy the liver was found to be riddled with abscesses containing greenish yellow pus The right lobe contained four, varying from the size of a walnut to that of a small orange, the left lobe contained one of the size of a walnut Both large and small intestines appeared to be normal and no healed ulcers indicative of recent dysentery could be found. The pus of the abscesses contained the amœba coli.

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but in his opinion the absence of suitable food is undoubtedly the principal one As soon as he had decided on his course of action Dr Laurent, considering that reference to Saigon for permission meant a fortnight's delay, prevailed on the local commandant to sanction an alteration of the soldiers' ration Hitherto each man had been in receipt of 12 meals of fresh beef and two of preserved beef per week, but under the new order he drew 11 meals of pork with fresh vegetables and only three of fresh beef, the issue of preserved meat being entirely suspended "The result was not long in abeyance, the epidemic was at once rooted out The cause which we considered the probable one being removed the effect disappeared and to-day, three months later, the same alimentary modifications having been conserved, has not reappeared" The idea that beri beri is determined by improper food is not a new one As far back as 1883 Dr Kanehiro Takaki came to the conclusion that the cause of "kak'ke," as the disease is called in Japan, was to be sought for in a defective dietary In the Japanese navy in 1882 and 1883 the deaths from beri beri numbered 51 and 49 respectively, while the ratio of cases to strength was 404 4 and 231 2 per 1000 At the suggestion of Dr Takaki the naval ration was then remodeled, when immediately an improvement became manifest In 1884 only eight deaths were registered and the sick rate fell to 127 3 per 1000 This was a notable triumph, but as yet the full effects of the judicious diet had not appeared In 1885 there were no deaths at all from "kak'ke" or beri beri and the sick-rate was only 5 9 per 1000 In 1886 the death column continued blank and no more than three cases of the disease were entered, yielding an insignificant rate of 0 3 per 1000 In the following year both columns remained blank, and so, with a trifling exception in 1889, it has happily continued ever since

"THE CHEMISTRY OF SAUSAGES"

WITH reference to the remarks published under the above heading in our issue of April 8th a lurid light is thrown upon the composition of these "delicacies" by a trial held at Dover on April 7th of a butcher's agent for overcrowding cattle In one case a cow was found to be in such a bad condition on its arrival at Dover from Ashford that it had to be killed there and then According to the report in the *Daily Chronicle* the carcass, which was stated to be one mass of bruises and to show a great amount of congealed blood under the skin when this was removed, was sent to the local sausage factory We earnestly hope that the sanitary authorities of Dover will keep an eye upon the local sausage factory The magistrates held that cruelty was not proved against the prisoner, which doubtless was the case, but it is pretty obvious that someone had been cruel and also that if the local sausage factory is allowed to go on its career unchecked several people will run a fair chance of being poisoned

A SANATORIUM FOR PHTHISICAL PATIENTS AT THE CAPE

DR OSCAR LEVY writes to us to draw attention to a new sanatorium recently promoted at Harrismith in the Orange Free State It is claimed, says Dr Levy, that Harrismith possesses exceptional climatic advantages, such as dryness, a sunny sky, elevation, and bracing climate An account of the district sent out by a layman interested in the scheme states

The town has a very excellent water supply The main part of the sanatorium is to be erected against the side of a hill, 5400 feet above the sea and about 25 minutes' walk from the town in a well sheltered position Barely three miles from that spot and just near to the town there rises the great Platberg It has an altitude of almost 8000 feet above the sea The summit of this mountain is in extent about three and a half English square miles Owing to the peculiar formation of the mountain its summit has likewise a splendid water supply On this mountain or near its summit lightly constructed summer houses are to be erected for the patients In the same district is another mountain where at an elevation of not far from 10,000 feet a second summer house might be established later This last-mentioned mountain, notwithstanding its elevation of over 11,000 feet, keeps free from snow All these localities are situated in such a manner that they experience almost always the same weather By this circumstance and the difference in the height of these sites a very excellent opportunity would be given for observing more especially the effects of altitude on the disease

The promoters of the scheme state candidly that they are not medical men, but they are desirous of obtaining the opinions of the profession on the scheme All we can say is that if the climatic conditions are really such as are put forward in this prospectus, then the district should be eminently fitted for a sanatorium

THE MIDWIVES BILL

THE Bill for the Registration of Midwives came on somewhat unexpectedly on Wednesday evening when Mr Tatton Egerton moved the second reading, stating his belief that the Bill had received the acceptance of the medical profession Mr T P O Connor moved the adjournment of the debate on the ground that the measure was of too great importance to be discussed at so late an hour in the afternoon, while he denied that the medical profession was unanimous in favour of it The Speaker declined to accept the motion as the debate was due by rule to be adjourned in a few minutes, and Sir William Priestley, who is understood to be a supporter of the measure, talked it out

MULTIPLE AMŒBIC ABSCESS OF THE LIVER WITHOUT DYSENTERY

IN the "Proceedings of the Philadelphia Pathological Society" of January Dr Joseph T Buxton has recorded an instance of multiple amœbic abscess of the liver without dysentery—a case of some importance since Dr Lafleur, writing in Allbutt's "System of Medicine," declares that "amœbic abscess of the liver must for the present be considered as invariably secondary to active or latent amœbic dysentery" A woman, aged 41 years, was admitted to hospital Her chief complaint was of weakness and tenderness in the right side of the abdomen Four weeks previously she began to grow weak, her appetite failed, and she was exhausted on the least exertion At times there was nausea after eating The bowels were loose during the whole illness No history of dysentery could be elicited. The patient was emaciated The skin had a peculiar dirty and yellow appearance and was a little cyanosed The conjunctivæ were somewhat icteroid The tongue was dry and parched and was covered with a brownish fur The pulse was rapid and thready The abdomen appeared to be distended Liver dulness began at the fourth space and extended two fingers' breadth below the level of the umbilicus The right lobe was distinctly palpable and irregular, the surface was smooth and tender at points The left lobe could not be felt and was not tender The feet were œdematous and there was albuminuria On the third day after admission abdominal tenderness was much more marked and more general and the area of hepatic dulness had increased, extending to the crest of the ilium The edge of the left lobe could now be felt extending about two fingers' breadth below the costal margin A nodule could be felt upon the surface of the right lobe The bowels were regular and the stools were normal On the fifth day tenderness was extreme over the left lobe of the liver which now extended four fingers breadth below the costal

margin The pulse was weak and rapid and respiration was laboured On the sixth day a little blood was vomited with food the body was cold and cyanosed and the patient died At the necropsy the liver was found to be riddled with abscesses containing greenish yellow pus The right lobe contained four, varying from the size of a walnut to that of a small orange, the left lobe contained one of the size of a walnut Both large and small intestines appeared to be normal and no healed ulcers indicative of recent dysentery could be found The pus of the abscesses contained the amœba coli

A MEDICAL JOURNALIST

THE *Journalist* of March 11th, an American paper "devoted to all who make or read newspapers," contains an interesting biographical sketch of Dr George F Shrady, editor of the *New York Medical Record* After alluding to the high position held by Dr Shrady both as a surgeon and as a writer, the fact is mentioned that for 32 years continuously Dr Shrady has been editor of the *Medical Record* and that "under his guiding brain and management his journal has become *The Lancet* of the West" It would seem from this article that a distinguished medical man in the United States has one duty to perform at all times and uncomplainingly from which his British brothers are free He must be at home to interviewers, and if an epidemic breaks out or some celebrated case in connexion with medicine engages the attention of the law courts they swoop down upon him relentlessly This was especially Dr Shrady's case during the illness of the late General Grant who was his patient The incident in Dr Shrady's life of which he is stated by the *Journalist* to be most proud is his successful support of a movement for the erection of a monument to Dr J Marion Sims "It will be recalled," says the *Journalist*, "that Dr Sims was of Southern birth and sympathies and that shortly after the Civil War he established himself in Paris and suddenly rose to commanding eminence in his speciality throughout Europe In preparing to return to America the proposition was to join himself in partnership with Dr Shrady, when an agreement was made between them that the one surviving the other should write the deceased's biography!" Dr Shrady interpreted his responsibility towards his friend's memory in a liberal manner, for he was not content with mere words but secured the erection of a statue

GARBAGE-MONGERS.

WE are thankful to say that at length it seems as if the scoundrels who make their living by poisoning their neighbours will be compelled to admit that the game is not worth the candle On March 16th two brothers named Hartridge were each sentenced to four months' hard labour for having a quantity of putrid meat for the purpose of preparation for sale Having appealed, however, they are still at large — On April 6th Joseph Fells and Vernon Fells were, at the Thames police-court, charged with having on their premises a quantity of tinned food which was unfit for the food of man The stuff included milk, salmon, pineapple, peaches, and lobster There were also 1373 tins of bad sardines Mr F W Alexander, the medical officer of health of Poplar, said that Mr Palmer, manager to Mrs Fukes of Stainsby road, Poplar, asked him on March 1st to give an order to destroy some tins of lobster as trade refuse There were 185 tins in all and he opened 166, all of which were bad Mr Dickinson sentenced Joseph Fells to four months hard labour and 20 guineas costs Vernon Fells, who was young, was discharged with a caution. Fells, it will be noticed, did not appeal —On April 7th Henry Pullen appeared at the same court to answer the charge of having in his possession diseased meat intended for the food of man The food consisted of four tuberculous quarters of a cow and a liver which was full of abscesses Mr Pullen said that when buying the cow he found fault with it so as to get it as cheap as he could He then sold it as the best meat That was how he got his living It was a trick of the trade The cow in question, it was stated, had cost £6 We rejoice to see that the latest trick of the trade has cost Mr Pullen £30 fine and £7 7s costs Mr Pullen's address is 210, Devon's road, Bromley by-Bow

THE Pasteur monument at Lille and the new buildings of the Pasteur Institute which owe their existence to the generosity of Dr Calmette were opened on April 9th We hope to give a detailed account of the proceedings next week

WE regret to learn the death of Mr Jukes de Styrap, the well known author of "A Code of Medical Ethics," which has occurred at his residence in Shrewsbury Mr de Styrap was in his eighty fourth year

THE PREVENTION OF TUBERCULOSIS

(Continued from p 9)

BELFAST

AT a meeting convened by the Lord Mayor of Belfast in the City Council Chamber on April 4th, Sir William Broadbent, Bart, delivered an address on the Prevention of Tuberculosis After explaining the constitution and mode of action of the National Association for the Prevention of Consumption and other Forms of Tuberculosis he said that it was fitting that Belfast should take a prominent position in this movement as a medical practitioner of that city—the late Dr Henry MacCormac—was a pioneer in the preventive treatment of phthisis and preached ventilation both by way of prevention and cure Sir William Broadbent pointed out that to herd phthisical patients together in a special hospital, as had formerly been the practice, with double windows to prevent the access of cold air, was really to intensify the mischief, while to disseminate phthisical patients in any considerable numbers through the wards of a general hospital was attended with risk of doing harm It was not therefore to be wondered at that the best treatment for phthisis did not originate with hospitals or hospital physicians, but by the operation of general hygienic laws phthisis had diminished by 50 per cent during the last 50 years, still one seventh of the deaths in the British Islands was due to phthisis and about 70,000 people died from phthisis or tuberculous disease every year in Great Britain and Ireland Sir William Broadbent then in a popular way pointed out how the disease was spread by the dried expectoration of phthisical patients being converted into dust and inhaled, the essential element in the dust being the bacillus to which sunlight and fresh air were fatal, and in out-door life ventilation, open windows, and sunlight penetrating to every part of a dwelling they had important agents in the prevention of phthisis He emphasised the importance of destroying the expectoration The association felt that they could not adopt the view that phthisis should be notified like fevers Sir William Broadbent then referred to the question of heredity or constitutional predisposition and showed how immunity might be brought about, discussing the influence of food, sunlight, fresh air, exercise, and alcohol He thought that the facts which gave rise to the idea that phthisis was completely hereditary were capable of explanation by considering that members of the same family were exposed to the same conditions, especially damp and ill ventilated houses He advocated the thorough disinfection of all rooms which had been occupied by phthisical subjects and in this way the death certificate might be used as a notification of disease He traced the influence of the spread of the disease by milk and in this matter of milk the spirited action of far seeing farmers and of different municipalities would lead, he believed, to the

realisation of the object which they all desired—the entire elimination of tuberculous meat and milk from the supply Finally, he discussed the question of the open air treatment and said he believed that for the cure of phthisis they required plenty of fresh air and so far as they could secure it protection from dust and winds, together with as much sunshine as possible Every large centre of population should have close at hand or within easy reach some place where the open air treatment of phthisis could be carried out, and he thought that municipalities would come to recognise that it was cheaper to send their phthisical patients to a place where there would be a chance of recovery than simply to house them in infirmaries until they died At the conclusion of Sir William Broadbent's address, on the motion of the Marquis of Dufferin, seconded by the President of the North of Ireland Branch of the British Medical Association (Dr Henry O'Neill), it was decided to approve of the constitution of a branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis, and that those present should form themselves into such Office-bearers of the branch having been appointed, the meeting concluded with votes of thanks to Sir William Broadbent and the Lord Mayor (who presided) After the meeting was over the Lord Mayor entertained at luncheon in one of the committee-rooms of the Town Hall Sir William Broadbent and other friends who had been present.

ABERDEEN

Dr Matthew Hay, the medical officer of health of Aberdeen, has, in accordance with instructions to that effect, just submitted to the Public Health Committee of the Town Council of that city suggestions for the prevention and control of tuberculous disease The report points out that tuberculous disease destroys in Aberdeen about 350 persons every year and is accountable for one out of every seven deaths, or, taking into account the deaths of children registered as due to ill-defined causes, Dr Hay believes "that tubercle, directly or indirectly, determines nearly one fifth of all the deaths within the city" After referring to the wide dissemination of tuberculous disease and its curability the report states that efforts to prevent tubercle must be largely directed against the transmission of the tuberculous infection or germs from already infected human beings or from infected animals It is remarked that owing to general sanitary reforms and an improved standard of living the mortality from tuberculous diseases, especially from phthisis, has declined greatly within the past 40 years, having fallen in the case of phthisis in Aberdeen to nearly one-half of that which it formerly was, but that there is still large scope for improvement Numerous suggestions are then made for the more effective control and prevention of the spread of tuberculous disease within the city These relate (1) to the purity of air in the atmosphere, in dwelling houses, in schools, and in workshops, and under this branch a stricter enforcement of the enactments for the abatement of smoke from the chimneys of workshops and manufactories in Aberdeen is recommended, (2) to proper feeding, (3) to proper clothing, and (4) to physical exercise Then follow detailed precautions applicable to the community and to persons suffering from tuberculous disease respectively, and suggestions for the prevention of the spread of tuberculous infection from the lower animals Dr. Hay's chief suggestions are—the direction of the attention of keepers of hotels, restaurants, and eating houses to the necessity for great care in the cleansing of eating utensils, the preparation under Section 65 of the Public Health (Scotland) Act of suitable by laws for regulating the cleansing and sanitary condition generally of public conveyances, the consideration of the question of a sanatorium (in the country) for phthisical patients, and of the associated out-door or dispensary arrangements, the consideration of a scheme for the inspection of cows in all dairies supplying milk to the city, with a view to preventing the sale of tubercle-infected milk, and the consideration of the question of providing a public sterilising station for milk Dr Hay also makes recommendations to the Town Council as to the cleansing of foot pavements, &c, the systematic securing of open spaces for recreation, the provision of public gymnasia with, if possible, public baths attached, the formation or encouragement of cottage areas and the discouragement of the tenement system of housing, the hastening of the demolition of slum dwellings, obtaining power to raise the minimum cubic space for each person in the dwelling houses, memorialising the Home Secretary as to increasing the minimum cubic space for persons in workshops, obtaining power to prohibit the opening in future of underground workshops, obtaining power to increase the amount of open area required for all new houses, and the establishment of a public slaughter house Regarding the last-mentioned question—viz, that of a public abattoir—Dr Hay regrets that when the proposal was recently before the Town Council it met with a discouraging result The memorandum will be considered at as early a date as possible by the Public Health Committee, the members of which are understood to be desirous of something practical being done in Aberdeen in helping on the "new crusade" against tuberculosis The convener (or chairman) of the committee is Mr John Robertson, L R C P & S Edin

BRISTOL

Meetings have been held in Bristol in connexion with the National Association for the Prevention of Consumption and Other Forms of Tuberculosis, and a provisional committee of medical men has been formed, with Dr E Long Fox as chairman, Dr D S Davies as vice-chairman, Dr P Watson Williams as honorary treasurer, and Dr Michell Clarke as honorary secretary

KANTHACK MEMORIAL FUND

THE following is a list of the subscriptions which have been received for the Kanthack Memorial Fund, concerning which we have already written in THE LANCET Dr J H Drysdale, 25 Welbeck street, W, is acting as honorary secretary We understand that the Fund will shortly be closed, so that intending subscribers should make no delay in sending their contributions

	£	s	d.
Amount already acknowledged in THE LANCET	267	11	0
Dr H P Cholmeley	1	1	0
Dr J S Edkins	5	5	0
Mr W E. Sargant	1	1	0
Mr T R. Smith	2	2	0
Mr R C Ackland ..	2	2	0
Dr W Osler, F R.S (Baltimore)	10	10	0
Lord Lister	10	10	0
Mr Alfred Willett	10	10	0
Sir Richard Thorne, K.C B.	2	2	0
Mr Stephen Paget	1	1	0
Dr John Fawcett	1	1	0
Mr C. H Cosens	5	5	0
Dr J R Leeson	1	1	0
Dr J Calvert	5	5	0
Dr G C Garratt ...	3	3	0
Mr R A. Walter	2	2	0
Dr J D Rawlings	2	2	0
Dr W Black Jones	1	1	0
Mr J Ackery	3	3	0
Dr Arthur Latham	10	10	0
Mrs. Unwin	5	0	0
Dr A. B Green	5	0	0
Dr G Walker	1	0	0
Mr H S Wellcome	5	5	0
Dr C F Marshall ..	1	1	0
Dr B Clifford Beale	3	3	0
Dr T P Legg	1	0	0
Dr A. B Rendel	5	5	0
Anonymous	1	1	0
Mr J H Churchill	1	1	0
Mr Claud Worth	1	1	0
Mr Ernest Clarke	2	2	0
Dr H J Bumsted	5	0	0
Mr D H F Cowin ...	0	10	0
Dr J G Forbes	1	0	0
Mr Albert Norman ..	5	5	0
Dr A. M Mitchell	2	2	0
Dr H H. Tooth	5	5	0
Dr A. Lyndon ...	2	2	0
Dr J L. Maxwell ...	1	1	0
Dr R. A. Reid ..	0	10	0
Mr T G A. Burns	5	0	0
Dr A. G Penny ..	1	1	0
Mr E C Frend ..	0	10	6
Dr A. L. Ormerod	1	1	0
Dr E. W Ormerod ..	1	1	0
Dr A. F Stabb	5	5	0
Mr E. W Brewerton	2	2	0
Dr Mabyn Read	1	1	0
Dr M L. Hepburn	1	1	0
Dr R. Farrar	1	1	0
Dr W J Horne	2	2	0
Mr G J Briggs	1	1	0
Dr T H Molesworth ..	1	1	0
Dr P Horton Smith	2	2	0
Dr F W Robertson	1	1	0
Mr F Belben	2	2	0
Dr C. Balfour Stewart	5	5	0
Dr C Neill	10	10	0
Dr C Addison	2	2	0
Dr E F Trevelyan	3	3	0
Dr W B. Addison	1	1	0
Mr A. Cuddon-Fletcher	1	1	0
Dr G H Sowry	1	1	0
Dr R. Sevestre ..	2	2	0
Dr J Holday	1	1	0
Total	£459	2	6

THE MEDICAL DEFENCE UNION

ANNUAL GENERAL MEETING

THE annual general meeting of the Medical Defence Union was held on April 6th at St Martin's Town Hall The President, Dr W S A GRIFFITH, was in the chair After the minutes of last year's annual meeting had been confirmed and signed, the report and statement of accounts for the year 1898 were presented

The report, of which we gave a *résumé* last week, dealt exhaustively with the aims of the society and its work during the past year and laid special stress on the fact that

the chief duty of the Union is the defence of its members and not the benefit of the profession as a whole, which is more properly the work of the General Medical Council and the British Medical Association It suggested that much might be done to increase the numbers of the Union if the members, especially those who had received the full benefits of the society, would make more generally known the great advantages attached to membership The Council regretted having had to take strong measures to secure more prompt payment of subscriptions which were allowed to fall in arrear The report further stated that owing to the able way in which the Union carried on its work, the British Medical Association had considered it unnecessary to take up the work of medical defence The solicitor's report stated that though there had been fewer cases than in the previous year more important decisions had been involved and that this reduction in number was a healthy indication of the growing influence of the Union s weight The chief cases considered by the Council were enumerated and they served to show the vast amount of good work done by the Union on behalf of its members and of the whole profession

The CHAIRMAN, in moving the adoption of the report, said that it was a matter of doubt to the Council whether members read the report which was sent to them and whether they had any idea of the amount of work done The work was increasing yearly as shown by the report and it involved a considerable sacrifice of time The meetings of the Council had now to be as frequent as two a month and many had to be adjourned The success of the Union was largely dependent on the zeal of the secretary and the solicitor, and this year it was specially indebted to the additional work done by the treasurer during the secretary's illness and he thought that this additional work should be recognised in some suitable way He had no special statement to make with regard to the policy of the Union The solution of many important questions now agitating the profession might be thought a part of their duties, but owing to the great difference of opinion prevailing among medical men who make no real attempt to meet each other half way the settlement of such vital questions could not be expected yet On one point the Union was unanimous and that was that its duty was to defend every member of the Union who is attacked unfairly to the utmost of its power, and therefore it is inclined to take the work which lies before it rather than to deal with matters which the profession is not prepared to accept The question of the qualification of members was a matter which had been referred to the Executive Committee to report upon

Mr STAMFORD FELCE, in seconding the motion, congratulated the President, who had succeeded Mr Victor Horsley, on the ability with which he had discharged his duties

Mr E O BOUSFIELD objected to the Council not having drawn up a schedule of cases, as, in his opinion, if such a schedule were forwarded to each member of the profession it would have a great deal of effect as an actual statement of the work done and might be a means of increasing the membership

The motion for the adoption of the report was then carried unanimously

Dr W S A Griffith, Dr A H Jones, and Mr T Garrett Horder, the retiring members of the Council, were re elected

Dr J A MASTERS, in proposing that the accounts as audited by Mr Lewis Hardy be received, adopted, and entered on the minutes, said that no mention had been made of the work done by the honorary secretary, Dr H Campbell Pope, in the absence of the general secretary He was glad to say that the financial position of the Union was very gratifying

Mr Lewis Hardy was elected auditor for the ensuing year A sum not to exceed £100 was allotted *pro ratâ* to the provincial members of the Council as payment or part payment of their railway fares whilst attending Council and Executive Committee meetings

Dr DANFORD THOMAS then moved —

That this meeting of members of the Medical Defence Union, believing that no effectual legal action can be successfully taken against quacks and other unregistered and unqualified persons practising medicine for gain under the provisions of the present Medical Acts does consider that the time has arrived for the promotion of a Bill in Parliament for the amendment of the same and that this meeting would further suggest that the Council of this Union should take such action in the matter, or in conjunction with other associations take such measures as may be deemed advisable in assisting and supporting such amended legislation as may effectually protect the interests of the medical profession as well as those of the public generally

Dr W P HERRINGHAM, who seconded the motion, remarked that this was one of the most important things now before the profession and that there was nothing more important than to have its legal position more firmly established

Dr LOVELL DRAGE, coroner for Hertfordshire, said that, in the small experience which he had had, evidence was frequently given by unqualified and unregistered people who were sometimes supported by certificates issued by registered practitioners, this appeared to him to be a matter which the Union could remedy without going to Parliament

The CHAIRMAN said that whatever assistance ought to be given by the Union would be given, but it was neither just nor right to expend the money subscribed by 4000 members of the profession for the benefit of the whole

The motion was then unanimously adopted and the meeting terminated

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 6481 births and 4755 deaths were registered during the week ending April 8th The annual rate of mortality in these towns which had been 23 1 per 1000 in each of the two preceding weeks declined last week to 21 7 In London the rate was 20 8 per 1000, while it averaged 22 4 in the 32 provincial towns The lowest death rates in these towns were 11 8 in Cardiff, 16 1 in Bolton, 16 3 in West Ham and 16 6 in Gateshead; the highest rates were 26 7 in Halifax, 27 5 in Brighton, 28 1 in Burnley, and 39 9 in Wolverhampton The 4755 deaths in these towns included 379 which were referred to the principal zymotic diseases, against 397 and 401 in the two preceding weeks, of these, 125 resulted from whooping-cough, 85 from measles, 75 from diphtheria, 39 from "fever" (principally enteric), 33 from diarrhœa, and 22 from scarlet fever The lowest death rates from these diseases were recorded in Bolton, Croydon, Bradford, and Bristol, and the highest rates in West Ham, Manchester, Burnley, and Huddersfield The greatest mortality from measles occurred in Manchester and in Gateshead, from whooping cough in Birkenhead, Burnley, Preston, Halifax, Hull, and Sunderland, and from "fever" in Wolverhampton, Derby, and Salford. The mortality from scarlet fever showed no marked excess in any of the large towns The 75 deaths from diphtheria included 34 in London, seven in Sheffield, four in Portsmouth, four in Liverpool, four in Leeds, three in Swansea, three in Birmingham, and three in Leicester No fatal case of small pox was registered last week in any of the 33 large towns, and only one small pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday last, April 8th The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2234, against numbers declining from 2584 to 2322 on the five preceding Saturdays, 150 new cases were admitted during the week, against 224, 177, and 167 in the three preceding weeks The deaths referred to diseases of the respiratory organs in London which had been 604 and 505 in the two preceding weeks, further declined last week to 470 but were 93 above the corrected average The causes of 69, or 1 5 per cent, of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in Leicester, Nottingham, Salford, Bradford, and in eight other smaller towns, the largest proportions of uncertified deaths were registered in West Ham, Liverpool, Blackburn, and Preston

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns which had increased in the three preceding weeks from 21 0 to 23 3 per 1000 declined again to 21 8 during the week ending April 8th and slightly exceeded the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 17 7 in Edinburgh and 17 9 in Greenock to 25 7 in Dundee and 27 3 in Aberdeen The 665 deaths in these towns included 23 which were referred to whooping cough, 22 to measles, 20 to diarrhœa, nine to diphtheria, three to scarlet fever, and two to "fever" In all, 79 deaths resulted from these principal zymotic diseases, against 67 and 97 in the two preceding weeks These 79 deaths were equal to an annual rate of 2 6 per 1000 which was 0 9 above the mean rate last week from the same diseases in the

33 large English towns The fatal cases of whooping cough which had been 22 and 30 in the two preceding weeks declined again to 23 last week, of which nine occurred in Edinburgh, six in Glasgow, and four in Dundee The 22 deaths referred to measles showed a decline of three from the number recorded in the preceding week, and included nine in Glasgow, six in Aberdeen, and four in Edinburgh The fatal cases of diphtheria which had been two in each of the two preceding weeks rose to nine last week, of which four occurred in Dundee, three in Aberdeen and two in Glasgow The deaths from scarlet fever which had been six and four in the two preceding weeks further declined to three last week The deaths referred to diseases of the respiratory organs in these towns which had been 151 and 160 in the two preceding weeks declined to 144 last week, and were 13 below the number in the corresponding period of last year The causes of 28, or more than 4 per cent, of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death rate in Dublin which had been 31 9 and 31 6 per 1000 in the two preceding weeks rose again to 32 8 during the week ending April 8th During the 13 weeks of last quarter the rate of mortality in the city averaged 29 6 per 1000, the rate during the same period being 20 5 in London and 23 9 in Edinburgh The 220 deaths registered in Dublin during the week under notice showed an increase of eight upon the number in the preceding week, and included 15 which were referred to the principal zymotic diseases, against eight and 12 in the two preceding weeks, of these, five resulted from whooping-cough, five from "fever," three from diphtheria, two from measles, and not one either from small-pox, scarlet fever, or diarrhœa These 15 deaths were equal to an annual rate of 2 2 per 1000, the zymotic death rate during the same period being 1 7 in London and 2 6 in Edinburgh The fatal cases of whooping cough which had been two and three in the two preceding weeks further rose to five last week The deaths referred to different forms of "fever" which had been four and two in the two preceding weeks rose to five last week The three fatal cases of diphtheria showed a further increase upon recent weekly numbers The 220 deaths in Dublin last week included 33 of infants under one year of age and 67 of persons aged upwards of 60 years, the deaths of infants showed a slight further decline, while those of elderly persons showed a further increase upon the numbers recorded in recent weeks Eight inquest cases and nine deaths from violence were registered, and 85, or more than a third, of the deaths occurred in public institutions The causes of 12, or more than 5 per cent, of the deaths in the city last week were not certified

VITAL STATISTICS OF LONDON DURING MARCH, 1899

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality during March in each of the 43 sanitary areas of London With regard to the notified cases of infectious disease in the metropolis, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 6 7 per 1000 of the population, estimated at 4,646,752 persons in the middle of this year In the three preceding months the rates had been 9 5, 9 2, and 8 5 per 1000 respectively The rates were considerably below the average in St George Hanover square, Marylebone, Hampstead, Stoke Newington, Holborn, and Shoreditch, while they showed the largest excess in Fulham, St Saviour Southwark, Newington, Bermondsey, Rotherhithe, Lewisham, and Plumstead sanitary areas Two cases of small pox (one in Camberwell and one in Port of London sanitary areas) were notified in London during March, and only one small pox patient was under treatment in the Metropolitan Asylum Hospitals at the end of last month The prevalence of scarlet fever in London showed a further decline from that recorded in the two preceding months, among the various sanitary areas this disease showed the highest proportional prevalence in Fulham, Clerkenwell, Rotherhithe, Greenwich, Lewisham, Woolwich, and Plumstead The Metropolitan Asylum Hospitals contained 2272 scarlet fever patients at the end of March, against 2383, 2637, and 2535 at the end of the three preceding months; the weekly admissions averaged 196, against 239 and 236 in the two preceding months The prevalence of diphtheria in London during March showed a marked decline from that recorded in recent months, this disease was proportionally most prevalent in Hackney, St. George-in the East, St Saviour Southwark, St George Southwark, Newington, Bermondsey, Battersea, and Lewisham sanitary areas There were 1159 diphtheria patients under treatment in the Metropolitan Asylum Hospitals at the end of March, against 1239, 1358 and 1388 at the end of the three preceding months, the weekly admissions averaged 127, against 173, 166, and 172 in the three preceding months The prevalence of enteric fever in London showed a considerable further decline from that recorded in recent months, among the various sanitary areas this disease showed the highest proportional prevalence in Hammersmith, Holborn, St Luke, City of London, and Limehouse The Metropolitan Asylum Hospitals contained 148 enteric fever patients at the end of March, against 255, 249, and 215 at the end of the three preceding months, the weekly admissions averaged 19, against 36, 34, and 27 in the three preceding months Erysipelas was proportionally most prevalent in Paddington, Bethnal Green, Whitechapel, St Saviour Southwark, and Rotherhithe sanitary areas The 25 cases of puerperal fever notified in London during March included two each in Paddington, Fulham, Stoke Newington, Bethnal Green, Poplar, Battersea, and Wandsworth sanitary areas

The mortality statistics in the table relate to the deaths of persons actually belonging to the various sanitary areas of the metropolis, the deaths occurring in the institutions of London having been distributed among the various sanitary areas in which the patients had previously resided During the five weeks ending April 1st, the deaths of 9699 persons belonging to London were registered, equal to an annual rate of 22 2 per 1000, against 16 9, 17 0, and 20 3 in the three preceding months The lowest death rates in the various sanitary areas were 13 6 in Hampstead 13 7 in Plumstead, 15 4 in Stoke Newington, 17 1 in Lewisham (excluding Penge), 17 2 in St George Hanover square, and 17 5 in Wandsworth, the highest rates were 27 8 in Chelsea, 27 9 in Shoreditch and in St. George Southwark, 29 9 in Holborn, 31 6 in St Luke 33 2 in City of London, and 33 8 in St Olave Southwark During the five weeks of March 830 deaths were referred to the principal zymotic diseases in London, of these, 179 resulted from measles, 31 from scarlet fever, 194 from diphtheria, 339 from whooping-cough, 35 from enteric fever, one from an ill-defined form of continued fever, 51 from diarrhœa, and not one either from small pox or from typhus fever These 830 deaths were equal to an annual rate of 1 9 per 1000, against 1 5 and 1 6 in the two preceding months No death from any of these zymotic diseases was recorded last month either in Strand or in Plumstead sanitary areas, in the other sanitary areas they caused the lowest death rates in Paddington, St George Hanover square, Stoke Newington, St. Giles, and St Martin in the Fields, and the highest rates in Fulham, St Pancras, Holborn, Clerkenwell, St George-in-the East, Limehouse, St Saviour Southwark, and Newington The 179 fatal cases of measles were 143 below the corrected average number in the corresponding periods of the 10 preceding years, this disease showed the highest proportional fatality in Hackney, St. Luke, Bethnal Green, St George-in the East, Limehouse, and Lee sanitary areas The 31 deaths referred to scarlet fever were less than half the corrected average number, the mortality from this disease showed no marked excess last month in any of the sanitary areas The 194 fatal cases of diphtheria slightly exceeded the corrected average number, this disease showed the highest proportional fatality in Fulham, Bethnal Green, St George-in the-East, Limehouse, St Saviour Southwark, Newington, Bermondsey, and Lewisham sanitary areas The 339 deaths from whooping-cough were 12 above the corrected average number, among the various sanitary areas this disease was proportionally most fatal in Hammersmith, Fulham, Chelsea, St Pancras, Newington, and Rotherhithe The 35 deaths from enteric fever were within one of the corrected average number, this disease showed the highest proportional fatality in the City of London and Greenwich sanitary areas The 51 deaths from diarrhœa were 16 below the corrected average number In conclusion, it may be stated that the aggregate mortality in London last month from these principal zymotic diseases was more than 18 per cent below the average

Infant mortality in London during March, measured by

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING MARCH, 1899

(Specially compiled for THE LANCET.)

Sanitary Areas	Estimated population in the middle of 1899.	Notified Cases of Infectious Disease.										Deaths from Principal Infectious Diseases											Deaths from all causes.	Death-rate per 1000 living	Deaths of infants under one year to 1000 births.
		Small pox.	Scarlet fever	Diphtheria.*	Typhus fever	Enteric fever	Other continued fevers.	Puerperal fever	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living	Small-pox.	Measles.	Scarlet fever	Diphtheria.†	Whooping cough.	Typhus fever	Enteric fever	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON	4,546,752	2	1286	993	3	197	3	25	410	—	2919	6·7	—	170	31	194	339	—	35	1	51	830	1·9	9699	22·2	144
West Districts.																										
Paddington	128 794	—	20	14	—	4	—	2	18	—	58	4·7	—	1	—	1	7	—	—	—	1	10	0·8	238	19 3	101
Kensington	178,699	—	28	17	—	9	—	—	20	—	71	4 3	—	1	1	3	12	—	1	—	2	20	1 2	765	22 0	165
Hammersmith	108,785	—	29	14	—	9	—	1	10	—	63	6·0	—	4	1	4	13	—	1	—	1	24	2 3	276	26 4	167
Fulham	130 720	—	79	30	—	3	1	2	16	—	130	10·3	—	—	1	10	20	—	—	1	3	35	2 8	304	24 3	183
Chelsea	90,721	—	26	17	—	3	—	1	6	—	53	6·7	—	—	—	3	19	—	1	—	—	23	2 6	258	27·8	152
St. George Hanover-square	80,876	—	14	5	—	2	—	—	5	—	26	3·4	—	—	—	1	—	—	1	—	1	3	0 4	133	17·2	133
Westminster	62,117	—	6	12	—	2	—	—	4	—	24	4·3	—	—	—	2	—	—	1	—	2	5	1·0	132	26 4	218
St. James Westminster	21 827	—	3	6	—	—	—	—	2	—	11	5 3	—	—	—	1	1	—	—	—	—	2	1·0	54	25 8	222
North Districts.																										
Marylebone	140,139	—	25	8	—	4	—	—	13	—	50	3 7	—	—	1	3	7	—	1	—	1	13	1·0	316	23 5	114
Hampstead	80 252	—	13	9	—	3	—	—	1	—	26	3·4	—	6	1	2	2	—	—	—	1	12	1 8	105	13 0	128
St. Pancras	244 548	—	92	50	—	16	—	1	14	—	173	7 4	—	12	5	8	40	—	4	—	3	72	3 1	556	23 7	165
Islington	348,085	—	98	45	—	18	—	1	23	—	185	5·5	—	26	1	7	34	—	6	—	1	74	2·2	736	22 1	139
Stoke Newington	35,187	—	6	3	—	—	—	2	1	—	12	3·0	—	—	—	—	2	—	—	—	—	2	0·0	52	15 4	82
Hackney	222 571	—	69	79	—	13	—	1	22	—	184	8·6	—	25	2	14	7	—	1	—	3	62	2 4	416	10 5	123
Central Districts.																										
St. Giles	37,106	—	8	1	—	1	—	—	5	—	15	4·2	—	—	—	1	—	—	—	—	—	1	0 3	86	24 1	41
St. Martin-in the-Fields	12,142	—	4	—	—	1	—	—	—	—	5	4 3	—	—	—	—	—	—	—	—	1	1	0·9	23	19·8	231
Strand	23 016	—	4	4	—	—	—	—	1	—	9	4 1	—	—	—	—	—	—	—	—	—	—	—	44	19 9	109
Holborn	29,621	—	2	4	—	3	—	1	1	—	11	3·9	—	2	—	—	3	—	—	—	3	8	2·8	85	29·0	218
Clerkenwell	66 068	—	26	14	—	1	—	—	5	—	46	7 3	—	4	—	4	5	—	1	—	4	18	2 8	163	25 7	197
St. Luke	40,868	—	10	6	—	7	—	—	5	—	28	7 1	—	5	—	—	1	—	1	—	3	10	2·6	124	31·6	138
City of London	27,988	—	7	2	—	4	—	—	1	—	14	5 2	—	—	—	—	1	—	2	—	—	3	1 1	89	33 2	150
East Districts																										
Shoreditch	121,071	—	13	7	—	11	—	—	13	—	44	3·8	—	9	—	3	9	—	1	—	1	23	2 0	324	27 9	189
Bethnal Green	128,938	—	23	29	—	5	—	2	28	—	87	7·0	—	14	—	10	6	—	1	—	2	32	2 6	298	24 1	138
Whitechapel	81 391	—	13	11	—	3	—	—	16	—	42	5·4	—	6	—	3	4	—	—	—	—	13	1·7	159	20 4	127
St. George-in the-East	48 560	—	6	18	—	3	—	—	5	—	31	6·7	—	7	1	4	3	—	1	—	—	16	3 4	119	25 6	157
Limehouse	58,307	—	12	11	—	8	—	—	5	—	36	6 4	—	7	—	6	3	—	1	—	1	18	3·2	153	27 1	181
Mile End Old Town	113,161	—	27	16	—	6	—	—	10	—	58	5 3	—	8	2	5	5	—	1	—	—	21	1·9	269	24 8	157
Poplar	170 606	—	39	33	—	9	—	2	19	—	102	6·2	—	6	1	11	6	—	2	—	1	27	1·7	406	24 8	150
South Districts																										
St. Saviour Southwark	24,207	—	6	13	—	1	—	—	5	—	28	10·8	—	1	—	5	—	—	—	—	1	7	3·0	62	26·7	138
St. George Southwark	60,530	—	14	31	—	3	—	—	4	—	52	9·0	—	3	—	2	4	—	—	—	1	10	1 7	162	27 9	144
Newington	124,166	—	31	70	—	8	—	—	14	—	123	10 3	—	5	1	10	25	—	1	—	2	44	3·7	316	26·7	162
St. Olave Southwark	11,098	—	4	4	—	1	—	—	—	—	9	8·5	—	—	—	2	—	—	—	—	—	2	1 9	36	33 8	188
Bermondsey	85,835	—	20	44	3	3	—	—	6	—	76	9·2	—	1	—	9	8	—	—	—	1	19	2 3	198	24 1	118
Rotherhithe	41 050	—	22	11	—	1	—	—	6	—	40	10·2	—	—	1	2	6	—	—	—	—	9	2 3	83	21 1	83
Lambeth	308,108	—	53	78	—	8	2	—	26	—	167	5·7	—	2	4	17	25	—	3	—	1	52	1·8	622	21 1	122
Battersea	174 998	—	53	65	—	6	—	2	10	—	141	8 4	—	—	—	10	10	—	1	—	2	23	1·4	327	19·6	153
Wandsworth	209 655	—	73	47	—	5	—	2	19	—	146	7 3	—	—	2	6	14	—	—	—	1	23	1 1	351	17 5	138
Camberwell	284,817	1	58	60	—	2	—	1	16	—	138	5 4	—	12	1	11	19	—	—	—	2	45	1·8	494	19 5	127
Greenwich	182 513	—	93	38	—	4	—	1	16	—	152	8·7	—	6	2	5	12	—	3	—	4	32	1 8	368	21·0	144
Lewisham (excluding Penge)	91 027	—	35	36	—	1	—	1	9	—	82	9·4	—	2	1	8	2	—	—	—	1	14	1·6	149	17 1	117
Woolwich	41,542	—	22	8	—	—	—	1	2	—	33	8 3	—	—	1	1	2	—	—	—	—	4	1·0	88	22 1	142
Lee	40 210	—	15	13	—	3	—	—	3	—	34	8·8	—	4	1	—	3	—	—	—	—	8	2 1	76	19·7	151
Plumstead	64 031	—	84	5	—	2	—	1	7	—	99	16 1	—	—	—	—	—	—	—	—	—	—	—	84	13 7	107
Port of London	—	1	—	—	—	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 45 cases of membranous croup.

† Including deaths from membranous croup

the proportion of deaths of children under one year of age to registered births, was equal to 144 per 1000 Among the various sanitary areas the lowest rates of infant mortality were recorded in Paddington, Stoke Newington, St Giles, Strand, Rotherhithe, and Plumstead, and the highest rates in Westminster, St James Westminster St Martin in the Fields, Holborn, Clerkenwell, and Shoreditch

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

STAFF SURGEON SAMUEL WELLESLEY JOHNSON has been placed on the Retired List of his rank

ROYAL ARMY MEDICAL CORPS

Captain E E Powell assumes medical charge of the Royal Artillery, Mounted Infantry, Royal Engineers, District Staff, and details, North Aldershot Lieutenant A E Weld proceeds to Netley Lieutenant R E G Phillips has left Woolwich Surgeon Lieutenant-Colonel D M'Fadyen (Medical Reserve of Officers) has been appointed to the medical charge of the station hospital and troops, &c Inverness Major J G Black has been transferred from Gibraltar to Belfast for duty Captain J Robinson embarks for service in the Straits Settlements

THE PHILIPPINE WAR

The Americans, under General Lawton, have captured Santa Cruz, the chief city of Laguna de Bay, with relatively very few casualties on their part, according to a recent cablegram received at Washington from General Otis The insurgent troops have been badly beaten and driven back with a considerable loss in killed, wounded, and prisoners The condition of the American troops is reported from Manila to be highly satisfactory, the cases of sickness being slight A good deal of fighting is still going on, but we may hope, as everything is apparently pointing that way, that the Philippine war will soon be over The insurgents have really nothing to gain by further resistance

NAVAL MEDICAL SUPPLEMENTAL FUND

At the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, held on April 11th, Inspector-General W H Lloyd, M D, in the chair, the sum of £79 was distributed among the several applicants

The Surrey, Eastern Counties, Berks, and Kentish Companies, Militia Medical Staff Corps, will be attached to the Royal Army Medical Corps from May 1st till the end of July and will join at Aldershot

Correspondence.

"Audi alteram partem."

THE OPERATIVE TREATMENT OF THROMBUS IN VARICOSE VEINS

To the Editors of THE LANCET

SIRS,—I have read with considerable interest Mr Pearce Gould's address upon the Operative Treatment of Varicose Veins published in THE LANCET of April 8th It is with great satisfaction that I note that he relates two clinical examples—apparently his whole experience—of the treatment of thrombosed varix by excision, a method which I have practised and taught for some years, my first operation for the excision of a large recent thrombus having been performed in 1885 I have now had experience of more than 60 cases of the kind (four of which are in progress at the present time), and in all of them the advantages of the treatment have been demonstrated in a remarkable way In my hospital work the removal of these thrombosed veins has become practically a routine proceeding The reasons which led me to adopt this radical method I have sufficiently indicated in an address on Varix published in THE LANCET as recently as Oct 15th, 1898, and subsequently issued by Messrs Longmans and Co It is unnecessary, therefore, to trespass upon your space further in order to repeat them here I am, Sirs, yours faithfully,

Chesterfield-street, Mayfair, W. WILLIAM H BENNETT

"CERTAIN ORGANISMS ISOLATED FROM CANCER AND THEIR PATHOGENIC EFFECTS UPON ANIMALS"

To the Editors of THE LANCET

SIRS,—In THE LANCET of April 8th Mr H G Plimmer says that my letter on the above subject[1] may give rise to a few misapprehensions He states that he and others have "*regarded* as parasites standing in causal relationship to the disease certain cell inclusions which could be found in cancer" He deduces the following from his observations and experiments "That by the use of appropriate means these intracellular bodies can be isolated and cultivated outside the body," and "that these cultures when introduced into certain animals can cause death with the production of tumours, so far with one exception of endothelial origin, and that pure cultures can be made from these growths which, when inoculated into suitable animals, will produce similar tumours"[2] Mr Plimmer will not allow me to say that he claims to have "obtained pure cultures of parasites standing in causal relationship to cancer" or to suggest that he "believes that the organisms are capable of inducing cancer" I regret that I have misrepresented him in the slightest degree Nevertheless, I am pleased that I have elicited these corrections I may now take it as not proved that Mr Plimmer has "obtained pure cultures of parasites standing in causal relationship to cancer" He distinctly states that he does not know whether the organisms are capable of producing cancer But Mr Plimmer still maintains that it is "logically deducible" from the experiments which he has described that he has achieved "the experimental production of malignant tumours in animals by an organism isolated from a malignant tumour in man"

You kindly allowed me to state my opinion that "the evidence brought forward in THE LANCET forms no logical basis for" this conclusion Until Mr Plimmer directed my attention to the fact I had not observed that there is a difficulty between him and myself about the meaning of words I used the words "malignant tumour" as I believe they are ordinarily understood and I thought that Mr Plimmer used them in the same sense It seems, however, that Mr Plimmer and I attach different meanings to these words The original meaning of the word "tumour" is a swelling, but many swellings such as tuberculous nodules and, in fact, all swellings caused by parasites are not now generally spoken of as tumours The term "tumour" is reserved for fatty, cartilaginous, and other new growths amongst which malignant neoplasms, carcinomata and sarcomata are usually included Mr Plimmer may possibly consider that I beg the question in thus classing carcinomata and sarcomata with fatty and cartilaginous growths, but I think that these growths (carcinomata and sarcomata) may fairly be considered non parasitic, if only on account of ancient usage, until it is proved that they are caused by parasites

On the other hand, Mr Plimmer thinks that "new formations, occurring as swellings or lumps in places where there should be none and visible withal to the naked eye, may fairly be" called tumours This would include granulation tissue, gouty concretions, gummata carbuncles, &c Moreover, he says that the organisms he has isolated from cancer have produced "multiple tumours in various parts and the death of the animal" and he thinks "that the term 'malignant tumour' is an accurate one for this set of conditions" There is here a latitude of definition which I have never contemplated in connexion with the words "malignant" and "tumour" "Tumour" at once assumes something very near, if not quite, its original meaning of a swelling, and "malignant" may be applied to every swelling which is caused by parasitic organisms and which proves fatal

It seems to me quite impossible to discuss this question further unless Mr Plimmer defines more exactly the meaning he attaches to the words "tumour," "malignant tumour," and "new formation" To prove that the organisms he has isolated cause a malignant tumour it is necessary to know what constitutes a malignant tumour and to show that the tumour produced may be so described I should expect that an organism isolated from a cancer would produce a

[1] THE LANCET April 1st, 1899.
[2] THE LANCET, March 25th 1899 p. 827

cancer if the organism were the cause of the tumour But Mr Plimmer has isolated from a cancer an organism which has produced swellings which Mr Plimmer describes as 'malignant tumours' and he says that these tumours are "certainly not carcinomatous" This suggests that there may be one cause for carcinomatous malignant tumours and that the same cause may produce malignant tumours which are not carcinomatous It may be so, but it seems to me that Mr Plimmer has definitely assumed a conclusion which if proved would be of the greatest scientific importance and in support of which he has produced no satisfactory evidence in THE LANCET

I pointed out in my letter in THE LANCET of April 1st that "it is important to know whether the culture used in each case was made from a body which had died from disease or from a freshly removed tumour, but this information is wanting" Mr Plimmer's reply is "With regard to the fourth paragraph in Mr Malcolm's letter the culture used was as stated in the third section of my paper, isolated from the case there mentioned."

In experiment No 9 the culture used was "made from the abdominal glands of No 8" I wanted to know whether in any of the other cases the culture isolated from the cancer mentioned by Mr Plimmer had been cultivated in the body of an animal that died and had been obtained again as a pure culture from that body before being used for these experiments Mr Plimmer leaves this indefinite still and I think it is an important point

I am, SIRS, yours faithfully,

Portman street, W, April 11th, 1899 JOHN D MALCOLM

INDURATIVE MEDIASTINO-PERICARDITIS

To the Editors of THE LANCET

SIRS,—I have been interested in Dr Whipham's communication on "Chronic Mediastinitis (Indurative Mediastino-Pericarditis) which appeared in THE LANCET of April 1st and 8th

The very careful clinical and pathological accounts which the author of the communication gives are an example of what is required in considering a comparatively rare disease like the one in question Four years ago, when I collected all the cases of indurative mediastino-pericarditis which I could find, I was much struck by the incompleteness of the records, and I notice that Dr Whipham repeatedly refers with regret to the fact that the details of the cases in various particulars are incomplete I fully recognise that that was so, and hope that in future Dr Whipham's example will be followed, and that the cases of the disease in question, which is a most interesting one, will be more fully recorded. Although full clinical and pathological records are often very tedious reading, it is only by the publication of such that anyone who attempts to elucidate a comparatively rare disease by an analysis of the cases can obtain the facts necessary for his purpose

The diagnosis of indurative mediastino-pericarditis is, as Dr Whipham says towards the end of his communication, a matter of considerable difficulty I was very amused to read that a case was under so able a writer as Dr Taylor for a considerable period and that cirrhosis of the liver at one time was thought to be the explanation of the symptoms and physical signs and that in one of Dr Whipham's own cases a consultation of the physicians at St George's Hospital took place without any definite diagnosis being made I can also make a similar confession For the last 18 years there is no disease which I have been more interested in and more constantly on the look-out for than indurative mediastino-pericarditis Under such circumstances one is apt to diagnose the disease one is interested in probably more frequently than one ought to do and to see its signs where they do not exist but I well remember one case which during the patient's life I always regarded as a simple case of chronic bronchitis and dilated heart but which to my surprise at the post-mortem examination turned out to be a typical specimen of indurative mediastino-pericarditis

The disease undoubtedly is difficult to diagnose, but the difficulties are by no means insuperable in the majority of cases and a careful consideration of its most essential features will as a rule save a physician from error There is one sign of indurative mediastino-pericarditis which I miss from Dr Whipham's communication—i.e, inspiratory swelling of the veins of the neck which although not a constant sign of indurative mediastino-pericarditis is, I believe, when present of great significance I am inclined to think, however, that it is more frequently absent than present in the disease in question and it is to be remembered that it has been recorded (Petrina) in a case of mediastinal tumour When, however, it is present and especially when we also have a pulsus paradoxus it is not too much to say that indurative mediastino pericarditis is the most probable disease present I am, SIRS, yours faithfully

Mosley-street, Manchester THOMAS HARRIS

"LOCK HOSPITALS AND LOCK WARDS"

To the Editors of THE LANCET

SIRS,—Referring to your annotation in THE LANCET of April 8th allow me to point out that the Liverpool Lock Hospital which has been closed comprised in reality the lock wards of the Royal Infirmary though in a separate building and in an adjacent street It is too true that the very name of "lock" hospital acts to a certain extent as a deterrent, but if that which we call "a rose by any other name would smell as sweet' I fear that what we know to be a lock hospital would under any other name be equally ostracised and equally unfortunate The Liverpool Lock Hospital, received patients not only from Liverpool and its neighbourhood, but from very distant places, it and the Manchester Lock Hospital being the only two of the kind in the whole north and centre of England. It is a significant fact that in three London hospitals the lock wards have been absolutely closed as such, in three others the beds have been reduced, whilst five more have never had any lock wards Unless the attention of the British nation can be roused to the necessity of supporting these hospitals and wards we shall before long be without either lock hospitals or lock wards I am, SIRS, yours faithfully,

Liverpool, April 11th, 1899 FRED W LOWNDES

DEATHS UNDER NITROUS OXIDE

To the Editors of THE LANCET

SIRS,—The case reported by Dr Howard H O Dent in THE LANCET of April 8th is of considerable interest and importance, and as it appears to me to very forcibly illustrate certain points which I have for many years endeavoured to emphasise I hope you will kindly allow me to make a few remarks upon it The interpretation which I would offer of the symptoms so clearly described by Dr Dent is somewhat different from that which he advances. In order to make myself perfectly clear it is necessary to first draw attention to one of the most important points—perhaps the most important—in the administration of anæsthetics With all anæsthetics, but more particularly with nitrous oxide when administered free from oxygen, mechanically obstructed breathing dependent upon the direct or in direct action of the anæsthetic itself, is very liable to arise I have elsewhere entered at length into the numerous causes which may come into play in the production of this particular form of respiratory embarrassment and I need not refer to them here Some degree of obstructed breathing is usually produced whenever pure nitrous oxide is administered in the customary manner to healthy persons As a general rule however no harm results because the removal of the anæsthetic allows air to enter the lungs and the asphyxial phenomena rapidly vanish But in subjects whose air passages are already narrowed by any pre-existing conditions respiration becomes much more quickly obstructed than is usually the case, and should the patient's general state be unsatisfactory circulation will not of course hold out against the respiratory arrest as long as under other circumstances

When nitrous oxide is administered free from oxygen three definite asphyxial phenomena arise towards the end of the administration, these are obstructive stertor, convulsive muscular movement, and cyanosis I have quite recently shown that all of these incidental factors may be made to come and go during any given administration of nitrous oxide and oxygen by diminishing or increasing the percentage of oxygen The three phenomena are in fact anoxæmic in nature and are not essential to the anæsthesia of nitrous oxide The stertor of ordinary nitrous oxide anæsthesia is the audible expression of obstructed breathing and the latter does not as a rule occur without the former It may however happen that the obstruction comes about noiselessly and, as in the case under consideration

respiratory movements may continue for a while, even though the air way be quite occluded The obstructed breathing produced by pure nitrous oxide appears to have as its immediate cause spasm of muscles capable of closing the superior opening of the larynx The spasmodic action of these muscles takes place in conjunction with the contraction of other muscles throughout the body If the hand be placed over the larynx of a person deeply under the influence of pure nitrous oxide the whole organ will usually be found to be spasmodically raised as in the first half of the act of deglutition, and when it is thus drawn up so that its superior aperture becomes closed by the epiglottis and base of the tongue respiration ceases It would be premature to attempt to specify the muscles which contribute to the occlusion of the larynx The point which I would emphasise is that arrested breathing under nitrous oxide is almost invariably obstructive and is rarely, if ever, dependent upon respiratory paralysis

It will, I think, be clear from the above considerations that although nitrous oxide is the safest general anæsthetic known there are certain cases in which it is distinctly dangerous Some years ago a well known writer on the subject of anæsthesia read an exhaustive paper on the physiological action of this gas and, in his zealous advocacy of its safety and universal applicability, went so far as to deny that it was an asphyxiant Now, teaching of this kind can only have effects such as we find in Dr Dent's case, and the sooner its fallacies are recognised the better will it be for all concerned I do not for one moment deny that in the hands of those who have had special experience pure nitrous oxide is a safe anæsthetic even though its administration be pushed to the point of arrested breathing But like other drugs it is not suitable in all types of subjects To state that the pure gas is not an asphyxiant is, I venture to think, a most misleading doctrine Fortunately our present knowledge enables us to disprove this assertion, but it will, I fear be some time before the truth becomes universally accepted

It is a matter for congratulation that at the present time we have reliable means at our disposal for obtaining nitrous oxide anæsthesia free from unnecessary asphyxia This can be accomplished by administering the gas with proper percentages of oxygen By this system the one disadvantage of nitrous oxide is eliminated and we have at our command an anæsthesia so safe that it is difficult to conceive any fatality arising during its maintenance

I am, SIRS, yours faithfully,

FREDERIC HEWITT

Queen Anne-street Cavendish square W., April 11th 1899

WHERE SHALL WE BUILD OUR NATIONAL SANATORIA FOR CONSUMPTIVES?

To the Editors of THE LANCET

SIRS,—The interest in the open air treatment of phthisis which has been stimulated by the propaganda of the Association for the Prevention of Consumption and Other Forms of Tuberculosis and the proposals to establish sanatoria in this country have already had one useful result in drawing attention to the possibility of successfully treating this disease in such a climate as that of the British Isles The conviction is gradually gaining ground that the fresh air treatment may be successfully carried out without sending the patient out of England This is important, for the majority of phthisical patients are unable to afford the expense or to stand the fatigue of visiting foreign health resorts The influence of climate in the causation of phthisis, once considered paramount is now given a secondary place, and though our variable climate is still considered by many as an obstacle to successful treatment we may sanguinely expect within a very few years to find this idea less prominent True, our climate is not the most suitable that is to be found, but "'twill serve" Hitherto the treatment of phthisis at home has been considered so nearly hopeless by the public, if not by the medical profession, that systematic attempts at cure have never reached the completeness obtaining in many foreign sanatoria That success is possible without leaving our own shores is known to most of those who have much experience in the treatment of phthisical cases, but as a [illegible] we have advised our patients to change their locality with [illegible] and subs[illegible] of season and in this country of many climates—[illegible] changes [illegible]een said of climatic "samples"—to chase the su[illegible]s has b[illegible] place to place The [illegible]ine from [illegible]

proposal to erect sanatoria must, however, direct our attention to the selection of such parts of the country as will be most suitable for all round residence—districts where phthisical subjects may be able to live in the open air all the year round with the maximum of sunshine and the minimum of rain All cases are not alike in their climatic requirements and just as some are benefited by the warmth of Egypt and others by the bracing cold of the Engadine altitudes, so will different localities in this country have their several claims to selection as sites for sanatoria But whether we seek for comparative warmth or for bracing uplands, dryness of soil and air with a maximum of sunshine throughout the year must be considered as essential

Before any large sanatoria such as are proposed in the scheme of the Association for the Prevention of Consumption can be commenced full information as to the climatic advantages of many localities will have to be collected, and I wish to draw attention to a district which has lately attracted my notice from the marked benefit received by a phthisical patient who recently spent some time there. Several well known health resorts are situated along the southern shore of the Bristol Channel and the climate of that district seems to be peculiarly equable and dry Portishead shares the advantage of the rest of this district and has in addition characters peculiar to itself Half an hour by train from Bristol it is easy of access Rising above the village is a hill some 400 feet high dotted over with residences The northern slope faces the Channel with the Welsh hills behind Newport in the distance, the southern slope looks across the valley to hills beyond Towards the east the view extends to the Clifton downs, whilst westwards the Channel leaves free passage for the soft west breeze which is the prevailing wind Sheltered thus by neighbouring hills from north and east, standing high above the water, and being favoured by an exceedingly clear atmosphere and small rainfall, the hills of Portishead are protected from cold winds and receive an amount of clear sunshine throughout the year which is exceptional. The tide of the Bristol Channel here rises and falls about 37 feet, and perhaps the air currents produced by this large diurnal alteration in the water level may account for the absence of fogs The Welsh hills seem to attract the clouds and to draw them away from the south side of the Channel Hill and dale, woods and lanes with fern grown banks, tempt one to wander in the open air, whilst the sunshine and warm breeze allow of this out-door life without risk Such is the account given me by residents and visitors and a short visit left me with the impression that they were not exaggerating The drainage and water supply are excellent With these advantages it is not surprising to find statistical evidence that the place is healthy An average death rate of 12 35 per 1000 from all causes for the last six years shows a death rate from phthisis of 1 48 and a zymotic rate of 0 99 per 1000 and a very low rate from pulmonary diseases such as pneumonia, pleurisy, and bronchitis The fact that many tender and subtropical plants will stand the winter without protection speaks favourably for the temperature There may be several places with climatic advantages equal to those of Portishead, but there must be few which would be more suitable for a prolonged residence for phthisical subjects seeking health.

I am, Sirs, yours faithfully,

J EDWARD SQUIRE, M D Lond,

Physician to the North London Consumption Hospital, &c.

April 8th, 1899.

PREVENTION OF ZYMOTIC DISEASES

To the Editors of THE LANCET

SIRS,—I should like to bring before the medical profession the subject of the prevention of zymotic diseases with a view of making our first line of defence in these diseases much stronger than at present, seeing that the serious consequences which they produce are apt to last for life I do not consider that we take sufficient precautions to ward off these affections early enough I have been much struck in treating these diseases with the immediate and marvellous curative results which follow chlorine gargles in scarlet fever and glycerine and carbolic acid gargles in other zymotic diseases From the moment they are commenced, while all the "ports" are kept open the disease is arrested in its progress Now, knowing all this, are we simply to go on for ever allowing these diseases to develop? I would say, Certainly not We ought to advance and keep ourselves constantly protected

against the invasion of the bacteria which cause them These bacteria attack first our throats and then spread to neighbouring mucous membranes, setting up first irritation, then inflammation and ulceration, followed by poisonous absorption, with all the well known clinical symptoms Therefore I would advise all parents guardians, and especially masters and mistresses of scholastic boarding houses to see that the young people attending school have their throats thoroughly and regularly gargled or sprayed with an antiseptic morning and evening, so that if they did come in contact with infection this timely care would keep them free from danger I have no hesitation in saying that if these directions were faithfully carried out they would go a long way to simply and effectually prevent these diseases The trouble of doing all this would be amply rewarded by relief from great anxiety not to speak of the great waste of time and money lost while the rising generation were being educated

I am, Sirs, yours faithfully,

Cheltenham. J WILSO , M D Edin

THE INFLUENCE OF CLIMATE IN THE TREATMENT OF PHTHISIS.

To the Editors of THE LANCET

SIRS,—Although Davos has probably had more phthisical patients in it than any other health resort in the world during the last 25 years, yet the scientific literature dealing with the medical aspects of the "cure' there and the statistics there are very limited Herr Hofrath Dr Turban s book "Beiträge zur Kenntnis der Lungentuberkulose," which has just appeared, gives some very important facts It enables Davos to take its place in the comparative statistics which are of such great service in determining the respective merits of rival resorts and methods

In England it is being asserted again and again that climate has nothing or very little to do with the cure and patients are told that they can be cured just as well in England as in the high Alps The new evidence is very much against this pleasant idea Dr Turban shows that during seven years 66 1 per cent of all the patients treated in the sanatorium over which he presides were absolutely or relatively cured—i e , were discharged in a normal state of health, and that from one to seven years after their discharge 48 per cent still retained this state of health Of patients in the third stage with extensive and serious disease of the lungs 17 4 per cent were permanently cured, while of those in the first stage with only slight tuberculosis in one lung 97 5 per cent , or almost all, were permanently cured At Falkenstein, the best known of the German lowland sanatoria, we find the number of absolute and relative cures given as 24 2 per cent or (according to Meissen's statistics) the permanent cures were only 22 per cent —i e , less than half the number obtained at Davos

That these results are obtained not only in closed sanatoria at Davos is shown by the statistics of Dr Lucius Spengler for the years 1887–90, when 41 8 per cent of the patients treated by him were absolutely and relatively cured—i e nearly twice as many as at Falkenstein Those of us who have personally experienced the curative effect of the Davos climate are glad to see its great value thus scientifically demonstrated

I am, Sirs, yours faithfully

EDWARD H DOUTY, M.A M D Cantab

Davos Platz, April 7th, 1899

"DIFFICULTIES UNDER THE NEW VACCINATION ACT"

To the Editors of THE LANCET

SIRS —I do not wish to appear to 'fight shy" of this correspondence and with your kind permission I will reply to ' P P s ' letter in THE LANCET of March 25th although Mr Blaker s letter of the same date anticipates my answer concisely and well I am using Messrs Burroughs and Wellcome s visiting list which I believe has been brought to its present stage of usefulness by the proprietors obtaining hints from many members of the profession Why should a column for vaccination cases be placed amongst the obstetric engagements if my opinion is incorrect? Surely it could have been entered in the ordinary part of the book. There is a vast deal of difference between calling on a patient whom you have heard is *enceinte* to offer your services and suggesting the advisability of having a child vaccinated whose mother you have attended when it was born, which attendance (generally speaking) makes you the medical attendant of the child

If "P P" noticed that an infant whom he had lately brought into the world was suffering from one of the following conditions—viz , hernia, a rapidly growing nævus in the neighbourhood of the eye, glioma of the retina, &c., or that ophthalmia neonatorum came on severely after a few days—I suppose it would be very unprofessional for him to warn the mother and to suggest treatment in any way, as it would be for him to try to save his little patient against an attack of small-pox I have had people complain to me ere now bitterly of the professional etiquette they have been subject to and I think that they have had just cause if they have encountered a similar practitioner to what "P P," perhaps unworthily, makes himself out to be True medical etiquette should not be only a boon to the practitioner but an equal one to the patient But whether I am right or wrong in my views there is no getting over the fact that the parent and practitioner between them after having large opportunities must ignore the law before any public vaccinator will bother them and therefore they are primarily at fault and it is a noble way to get out of the difficulty by blaming the public vaccinator

I am, Sirs, yours faithfully,

March 27th, 1899 FAIRPLAY

AN IMPORTANT POINT UNDER THE INFECTIOUS DISEASES (NOTIFICATION) ACT

To the Editors of THE LANCET

SIRS —I shall esteem it a great favour if you will advise me how to proceed in the following case I rendered my account to our urban council for the notification of infectious diseases cases which I had reported during the year 1898 and got a reply from their clerk informing me that he had been instructed by the council to deduct from my account all the cases which I had reported during the first six months as the council cannot pay debts which have been contracted more than six months before the making of the last general district rate—viz., on Oct. 28th last—and enclosing a cheque for the remainder of my account. Can I lawfully claim or demand payment for the first six months, or can I lawfully refuse to report further cases until my account is paid in full?

I am, Sirs, yours faithfully

April 12th, 1899 M.B , C.M

*** The case submitted to us is by no means free from difficulty Under the Public Authorities Protection Act, 1893, it is provided by Section 1 (*a*) as follows —"The action, prosecution or proceeding shall not lie or be instituted unless it is commenced within six months next after the act, neglect, or default complained of ," and it is probably on this that the urban district council refuse to pay fees for notifications sent in on or before the termination of October, 1898 But it might be argued that since the notifications were sent in to the medical officer of health and not to the urban district council the debt on the part of the council did not arise when the notification forms were sent in, but only when a summary of the amount due for them was transmitted to the clerk to the urban council, and that as six months have not elapsed since the debt became due it is still open to the medical practitioner to proceed for payment of the debt due to him Action on these lines should, however, be based on legal advice On the other hand, the urban council might be urged not to stand upon the strict letter of the law as interpreted to them by their legal adviser on the ground that if they paid a claim which was so obviously just, and if by chance it were surcharged by the auditor, the surcharge would certainly be remitted by the Local Government Board. Payment might perhaps be accepted on condition that the amount would be refunded if such surcharge were not remitted —ED L

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

The Plague Commission —The Progress of the Epidemic

THE Plague Commission continued its sittings in Bombay on March 20th Several of the former witnesses were re-examined Major Reade submitted a supplementary statement referring to the number of cases and deaths which have occurred lately in Poona He thought that rat infection had not played a large part in the outbreak at Poona He thought that the influence of rat infection had been exaggerated

Lieutenant-Colonel Lawrie, I M S , Plague Commissioner of Hyderabad, said that effective steps were taken for the detention of suspicious persons coming from infected districts on the railway and that the roads between Hyderabad and the infected districts were patrolled by medical search parties and that they failed to discover plague in any of the villages

Major Bannerman, Deputy Sanitary Commissioner, Madras, submitted a report on the inoculation of the 26th Regiment of Madras Infantry and said that one could not help being convinced that but for the almost complete inoculation and re inoculation of the regiment a second epidemic as severe as the first would have occurred

Dr Galliotti gave supplementary evidence He had, however, no further information regarding experiments with Lustig's serum The results were not very satisfactory He thought that the injection of serum seemed to improve the condition of the patients He admitted that all moribund cases and all cases thought likely to die were excluded from the serum treatment Cases also which were thought to be of the pneumonic type were also excluded

Mr O C James, drainage engineer to the Bombay municipality and member of the late Plague Committee, produced charts showing the progress of the plague in Bombay city He said that as regards the mortality no definite connexion was evident with the prevailing temperature, humidity of atmosphere, or wind He said that he thought it could not be doubted that the measures which have been adopted in Bombay had had the effect of diminishing the extent of the pest He gave detailed figures showing the excess mortality from all causes since the plague appeared and said that from the chart he exhibited the first epidemic was probably the worst one

Plague is still raging with unabated virulence in Bombay city The total number of deaths for the past week from all causes is recorded at 2408 The deaths from plague alone are probably about 250 a day, although only 1126 are officially recorded for plague during the past week The population of Bombay is a very fluctuating one During the first epidemic very large numbers left the city at the height of the panic Since then the population has apparently kept more stationary, although the influx during the past cold season must have been considerable Estimates of the population must be wholly guess work and delusive for purposes of satisfactory comparison The census figures of 1891 are the only ones reliable Some of the witnesses before the Commission have expressed opinions based on this fluctuating population which must therefore be accepted with great caution

In Calcutta plague administration appears to be in a very unsettled state The outbreak is slowly developing, but little or nothing is being done to stop its progress The powers possessed by the Executive are so feeble and fear of the native is so great that anything like plague sanitary administration is impossible It is rumoured that the Secretary of State has conveyed a strong recommendation to the Viceroy to enforce segregation and inspection in Calcutta, and that the Viceroy is in favour of the measure, but that the Lieutenant-Governor of Bengal is strongly opposed to the idea It is perfectly obvious that unless the powers of the Epidemic Diseases Act be acquired and exercised the hands of the Executive are paralysed If dirt and filth and offensive exhalations favour the spread of plague then Calcutta ought to suffer as severely as any place in India

So far, however, its ravages have been slight Inoculation is practically untried in Calcutta and the people will not hear of it There is at present neither fear of the plague nor of the plague regulations It is thought that any active measures would lead to disturbances, or at any rate that a panic amongst the people would ensue the city become depopulated and trade and business be brought to a stand still It is a somewhat healthy sign to hear complaints from the natives that nothing is being done

March 23rd.

BIRMINGHAM

(FROM OUR OWN CORRESPONDENT)

The Queen's Hospital

THE annual meeting of the governors of this institution was held on March 22nd under the presidency of the Lord Mayor (Alderman Beale) The report showed that the number of out-patients had decreased The registration fee of 1s for each patient should have produced from 28,559 patients some £1428, but in many cases it had been remitted so that the total amount was £916 The financial statement showed that £827 had been expended in excess of the income The extraordinary expenditure accounted for £658, but the extra and occasional sources of income had been substantial this year The great feature of the year was the installation of the electric light The nurses' home would be enlarged when sufficient means were obtained, this was a somewhat pressing necessity since it was desirable that the nurses when off duty should not be in the main building It was stated that the sum required for ordinary income was £10,000 a year The usual votes of thanks were passed.

The Ear and Throat Hospital

The fifty fourth annual meeting of the supporters of this hospital was held on March 16th The report stated that the number of new out-patients for the year was 3480, an increase of 140, the total number being 6368 647 patients were treated, as against 538 in 1897 111 applicants for treatment were rejected as having been found able to pay for medical advice, an important element in the management and supervision Financially there was a deficiency of £324 on the year's working and an appeal was earnestly made for increased subscriptions from the outlying districts from which many of the patients came

Birmingham Medical Institute

The annual meeting was held on March 23rd The report stated that the exercise of rigid economy during the year had prevented the ordinary expenditure from exceeding the ordinary income and owing to the receipt of a considerable sum in donations the revenue account showed an excess of income over expenditure of £59 17s 3d which had gone to diminish the debt at the bank Experience had shown that the operation of the by law adopting life compounding subscriptions had been prejudicial to the financial interests of the institute and the committee unanimously proposed its repeal The library comprised 12,557 volumes, of which 293 had been added during the year The advantages of the institute and the necessity for a larger number of members should become more widely known The support of the profession is very inadequately represented by the present number of members

A University for Birmingham

A communication has been received by Mr Chamberlain to the effect that a gentleman who wishes to remain anonymous and who is not connected with Birmingham proposes to testify his interest in the scheme for the formation of a university by giving a sum of £25,000 to the fund on condition that £225,000 are previously subscribed £135,000 have been already promised so that this entails the formidable task of raising £90 000, and to satisfy the conditions this must be done within twelve months An additional appeal has therefore been made with the earnest expectation of success The donations may be spread over five years It is evident from the subscription lists that a large mass of people in and around the city have not yet responded to the applications made and also so far have failed to appreciate the many advantages offered by the formation of the new university That many generous people exist in the midst of this large population has already been shown and their example should act as a stimulus to others to send in their contributions

April 11th.

LIVERPOOL

(FROM OUR OWN CORRESPONDENT)

The Medical Faculty of University College, Liverpool, and the Lying-in Hospital Clinical Midwifery

AN obstetric assistant has been recently appointed by the medical faculty of University College to supervise the attendance of students upon the practice of midwifery The appointment has been made with the approval of the committee of the Lying-in Hospital and there is every reason to believe that the assistance and the instruction supplied to students by this means will result in much practical benefit Dr Willett who has been elected to the post was a distinguished student at University College, Liverpool He has already filled the offices of house surgeon and house physician at the Liverpool Royal Infirmary Every opportunity will now be afforded to Liverpool medical students to obtain a practical knowledge of obstetrics, as the committee of the Lying in Hospital have thrown open both their in-door and out-door departments for clinical instruction. There is an annual average of over 2000 cases treated in the hospital and in the eight districts, the latter have been recently rearranged to include Greater Liverpool In each district an obstetric nurse resides in a "district home" which is provided with the telephone A district nurse who is a trained midwife is not allowed to take private practice, as she is adequately remunerated for her services Patients attended by students have the benefit of a nurse's services, and for the very poor gifts of clothing and food are provided by the committee of the Ladies' Charity The honorary medical staff of the Lying in Hospital and the district medical officers have cordially coöperated with and guided the committee of the hospital and the medical faculty of University College to the completion of the satisfactory arrangements now made for the practical training of students of midwifery in Liverpool In accordance with the agreement between the committee of the hospital and the medical faculty of University College the professor of midwifery has become *ex-officio* an active member of the honorary staff of the hospital, controlling two beds and occupying a seat on the medical board of the charity The medical faculty have closed their own separate out-door maternity charity, which is no longer required as such, and have converted Brownlow House into the official residence of the obstetric assistant, with whom students are recommended to reside during their term of attendance on clinical obstetrics The Lying in Hospital and Brownlow House are situated in very close proximity to University College and are connected by telephone In Liverpool there is now only one maternity charity (excluding the Poor law) and with it University College is intimately associated The yearly nomination by the medical faculty of a gentleman to fill the post of obstetric assistant has added another to the many clinical prizes open to former students of the college During the current year an increase in the work of the maternity charity has been recorded It is generally acknowledged that the recent changes in the administration have increased lay and professional confidence in the management of the Lying in Hospital. Mention has been made of the large mortality among the in patients at the hospital during 1898 which amounted to nine deaths In six of the fatal cases death was due to general disease entirely unconnected with obstetrics. two patients died from chronic renal disease, one from post-diphtheritic nephritis, one from leucocythæmia, one from basilar thrombosis, and one from cancer of the rectum The remaining three cases were sent in from the districts in a very serious condition.

The Eye and Ear Infirmary Extension of the Term of Office of Honorary Surgeons

By a recent resolution of the committee of the Eye and Ear Infirmary the term of office of the honorary surgeons has been extended to 60 years of age The regulation hitherto in force only permitted an honorary surgeon to remain in office for a period of 20 years This alteration of law places the Eye and Ear Infirmary in line with the principal Liverpool hospitals in the matter of age limit In proposing the change the position of the two assistant surgeons has not been overlooked. In future an assistant surgeon shall be entitled to six beds and to the rank of surgeon after seven years service. The senior assistant surgeon having fulfilled the conditions forthwith attains to the rank of surgeon and in less than two years the junior assistant surgeon will also attain to the same privileges The extension of the term now granted to the honorary surgeons was advocated in THE LANCET of Feb 27th, 1897, and it is needless to say that the action of the committee in the matter has met with the emphatic approval of the profession in Liverpool

The Sanatorium of the Liverpool Consumption Hospital

Acting upon the advice of Sir William Broadbent and the late Sir Douglas Galton the committee of the Hospital for Consumption have decided to build the new sanatorium for phthisical patients (the annexe to the hospital) at Delamere Forest It was the original intention of the committee to build at West Kirby, but the limited quantity of land at West Kirby and its environment were found to be unsuitable and the project could not be carried out under the most favourable circumstances The proposition to build the sanatorium at Delamere Forest has not been acquiesced in by some members of the committee who have consequently resigned

April 11th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS)

The Proposed Zoological Gardens for Edinburgh

ON April 7th an adjourned public meeting was held in Edinburgh to receive the report of the committee appointed to examine sites for the proposed zoological gardens for Edinburgh Professor Cossar Ewart occupied the chair The report dealt with a number of possible sites, among them being Redbraes Nurseries, ground at the Dean, ground at Warriston, ground at Bellevue, Hawkhill Recreation Grounds, ground of Restalrig House, ground at Joppa, ground on Comiston Estate, and ground on Barnton Estate The committee were not entirely satisfied with any of these pieces of ground The three most important points to be attended to were proximity to the population, an attractive situation, and a reasonable price Some members of the committee considered the ground at Barnton the most desirable, but it had the disadvantage of being three miles from the city Others of the committee thought that the most feasible of all the sites was a portion of the Arboretum The Chairman, in remarking on the report, said that there was an increasingly strong feeling in Edinburgh in favour of the establishment of a zoological garden In selecting a site it was necessary to consider first the health of the animals, and secondly the convenience of the public as regards distance from the city There were many reasons why such a garden should be established in Edinburgh He himself had recently been immensely impressed with the necessity of having something of the kind within reach of the students of the university which they would be able to use in the same way as they used the Botanical Gardens Various speakers followed, one of whom mentioned that the list of animals which had been drawn up represented a cost of about £6700 The speaker thought the whole scheme would not cost over £20,000 In conclusion, a motion was carried that the committee should approach the Government through the municipality with a view to ascertaining whether a piece of ground could be obtained within the Arboretum for the proposed zoological gardens

Conference on the Prevention of Communicable Diseases

A meeting was held in the Edinburgh Council Chamber on April 10th between representatives of the Royal College of Physicians of Edinburgh and a sub-committee of the Public Health Committee of Edinburgh Town Council to consider a letter from the Royal College of Physicians regarding the reporting on morbid products from patients suffering from communicable disease and on materials such as milk and water suspected to be carriers of disease germs The Royal College of Physicians pointed out that a large amount of work of this kind had been done gratuitously in its laboratory for many years They recognised the necessity of continuing this work and wished to ascertain whether the town council would unite with them in meeting the expense incurred in it After some discussion the matter was left to the consideration of the Public Health Committee

University of Aberdeen

The chair of Natural History vacant by the death of Professor Nicholson has been filled by the appointment of

Mr J Arthur Thomson, M A , F R S E , extra mural lecturer on zoology, Edinburgh The most remarkable feature at the graduation ceremony on April 7th was the large number of graduates in Arts The degree of M D was conferred in five cases, M B , C M (old regulations) in eight cases, and M B , Ch B (new regulations) in 20 cases, while three others gained the diploma in public health The usual reception was held in the Mitchell Hall in the evening

Aberdeen Ophthalmic Institution

At this institution, which is under the charge of Dr Galloway as honorary surgeon, there were last year 3127 out-patients, the total attendances being 9117 The number of in patients was 75 and at the close of the financial year there was a balance in hand of £196 8*s* 6½*d*

April 11th.

IRELAND

(FROM OUR OWN CORRESPONDENTS)

The Health of Dublin

AN important letter recently appeared in the columns of the *Irish Times* from the pen of Dr Charles Moore in which he referred to the prevalence of tuberculosis and enteric fever in Dublin and to the neglect on the part of the corporation to adopt even simple measures for the safety of the citizens It appears that the Royal Commission held in Dublin in 1879 reported that slaughter houses, cowsheds, and dairies—some of them without adequate appliances for drainage, cleanliness, or ventilation—were then to be found in unsuitable situations within the municipal area and recommended strongly that they should be closed It is now 20 years since the Commissioners' report was issued, yet there still exist in the city over 60 slaughter houses, while there is no authorised inspection of the animals slaughtered, of men, and the cows which supply milk to the citizens The Registrar General for Ireland called attention some years ago to the fact among many others that in Berlin during the year 1892-93 of 142,874 oxen and cows slaughtered no less than 21,603 gave evidence of tuberculosis THE LANCET and the *Times* have insisted upon the importance of this matter in England The *Times* in a leading article on the Congress of Hygiene pointed out some months ago that on the Continent all private slaughtering of animals is forbidden. Professor Mc Weeney who is recognised in Ireland as a reliable authority on the subject has stated that tuberculosis in cattle is not quite so common in Ireland as in other countries, probably on account of the fact that Irish cows spend most of their life in the fields and are not stall fed The open-air treatment has thus apparently proved an effective prophylactic in the bovine as in the human race The matter is, however, very important on account of the wide prevalence of tuberculous disease among the people of this country, and although Mr Field, the Member of Parliament for the St Patrick's division of Dublin and a much respected member of the victualling trade, has been recently reported to have stated that he saw no reason why a butcher should not be permitted to carry on his own business in his own establishment the argument of Dr Moore is irresistibly in favour of his plea that all the private slaughtering houses in Dublin should be closed and that a large public abattoir should be constructed in the neighbourhood of the North Wall, a situation which for many reasons would be convenient and suitable

The National Hospital for Consumption in Ireland

The ball in aid of this charity at which their Excellencies the Lord Lieutenant and the Countess Cadogan have signified their intention to be present and which was fixed for April 18th has been postponed

Health of Belfast

At the usual monthly meeting of the Belfast Corporation on April 5th the chairman of the Public Health Committee (Alderman Graham, M D R U I) said that Belfast had the lowest death rate during the past year since it became a town In 1898 in Belfast the death rate per 1000 from chest diseases was 7 6, while in Dublin it was 9 6 In Belfast the death rate from all causes was 22 1 per 1000, while in Dublin it was 28 5 and in Cork 23 7 The death rate of Belfast is now calculated on a population of 350,000 as estimated by the Registrar General. In Liverpool in 1897 the annual death rate was 24·3, in Manchester it was 23 1, and in Preston it was 24 3, so that the mortality in Belfast is lower than in any of these towns Alderman Graham was in favour of destructors being placed in the centre of the city where refuse could be burned at small cost In the minutes of the Public Health Committee it was stated that they had investigated the causes of the last epidemic of typhoid fever and were satisfied that they arose in a great measure from the water supply from Stoneyford, but as the Water Commissioners are taking steps to obtain powers to improve the supply the committee hope that the causes would be removed at no distant date and they are prepared to appoint a sub-committee to confer with the Commissioners on the subject.

County Antrim Infirmary

On the afternoon of April 5th the new wing of the County Antrim Infirmary in Lisburn, known as the Queen Victoria Jubilee Annexe, was opened This addition, which consists of a room adjoining the original building, was paid for by the townspeople of Lisburn as a practical method of celebrating Her Majesty s Diamond Jubilee. This annexe not only will supply rooms for the nurses but has enabled the governors to open a children's ward as well as two private wards for paying patients

Presentation to Dr George Croker

On April 8th the friends of Dr George Croker, on the occasion of his retirement as a dispensary medical officer under the Local Government Board after a service of more than 60 years, 32 of which were spent in the Ballymacarrett district of Belfast, met and presented him with an address and a purse of sovereigns (£75) Dr Croker is one of the very oldest practitioners in Belfast, he graduated M D of Glasgow in 1840 and in 1844 he was made a Fellow of the Royal College of Surgeons in Ireland He was originally an apprentice of the late Dr Collis of Dublin He was first dispensary officer at Castlewellan, Dundrum, and Newcastle for eight years He then took charge of the Fever Hospital and Dispensary at Hillsborough, where he remained from 16 to 18 years, and after this he went to Shandtown (Belfast), where he resided two years, and then he was appointed medical officer to the Castlereagh Dispensary, where he has until quite recently been medical officer

Death of Dr Andrew Smyth, of Ballymena

I regret to announce the death of the oldest medical practitioner in Ballymena, Dr Andrew Smyth, which took place on April 8th rather suddenly He was in his usual health up to April 6th when he had a severe chill and became dangerously ill that evening Dr Smyth graduated M D of Glasgow in 1846 and practised all his life in Ballymena where he has been for some years consulting medical officer of health of the Ballymena Union. He was buried on April 10th, a very large number of friends and former patients following his remains to their last resting place

Belfast and District Lunatic Asylum

At a meeting of the governors of this asylum held on April 10th it was reported that 958 inmates were on the asylum register An official letter was read stating that the provisions of the new Local Government (Ireland) Act, 1898, are not to come into operation until May 16th next, consequently the existing board of governors will remain in office until then

New Medical Local Government Board Inspector

The Local Government Board are about to appoint an additional medical inspector and canvassing is going on at present for the post

The Prevention of Tuberculosis in Belfast

It is unfortunate that a good deal of dissatisfaction prevails in Belfast owing to the circumstance that leading citizens, both ladies and gentlemen, who always come to the front in philanthropic and health questions, were ignored at the recent meeting There was no representation of the clerical profession and, contrary to all precedent in Belfast, no clergyman in orders was amongst the speakers, and, still more extraordinary, none was on the list of office-bearers submitted to the meeting When a cut and dried resolution appointing office-bearers (everyone is asking who nominated them) was proposed members of the Trades Council at once moved and seconded an amendment that their President be added to the committee, one of the speakers saying that on that occasion "the artisan and working classes were quietly walked over and ignored, but he did not think they were in the temper at present to permit it" The Lord Mayor saved a scene by tactfully accepting the suggestion and so the

amendment was withdrawn At a meeting of the city corporation next day (April 5th) Councillor McCormick—a prominent member—protested against the way in which the chairman (Alderman Graham, M D R U I) and the members of the Public Health Committee had been slighted by those who took upon themselves the arrangements of the meeting, which was all the more remarkable as the head of the corporation, the Lord Mayor, was asked to preside Councillor McCormick is reported in the public press to have said that the suggested remedies (for the prevention and treatment of consumption) "were totally inapplicable to Belfast, and that instead of following chimerical ideas and Utopian schemes it would be better to strengthen the hands of the Public Health Committee" Some members of the medical profession in Belfast, as elsewhere (perhaps they are antiquated and not quite "up-to-date"), are beginning to question the policy at present in vogue of lecturing a non scientific public on a professional question which is still so largely in the experimental stage In former times such a practice would hardly have been regarded as consistent with the high traditions of the profession Others, again, are fearing that time may bring a swing back of the pendulum regarding the unfailing benefits so much vaunted of late in lay magazines of the sanatorium treatment The meeting would have been more successful had it been arranged on the model of the one recently held in Edinburgh where there was more of a discussion on the subject, and certainly the dissatisfaction which has arisen would have been avoided had those inexperienced persons who apparently ran the meeting summoned beforehand the whole profession to discuss in a friendly way the action which they should take on such an important occasion

April 12th.

PARIS

(FROM OUR OWN CORRESPONDENT)

Notes on News

THE influenza epidemic has this winter assumed very grave appearances The mortality for the week ending March 31st, 1899, was 1341, while in preceding years the mean weekly mortality for March has been 1057 There is thus an increase of 284, or 40 per diem In the preceding week there were 238 deaths over and above the mean This increase is entirely due to pulmonary affections following influenza, the mortality due to other diseases remaining stationary

The Director of the Assistance Publique has just decided to create a new class of specialists for the hospitals—namely, ophthalmologists—whose ranks will be filled by means of a specially competitive examination Hitherto the medical officers of hospitals have been divided into physicians, surgeons, and accoucheurs, and even this last class has only existed as such for 15 years, having been brought into being on the motion of Dr Bourneville, a municipal councillor This idea met with vigorous protests on the part of the surgeons and three years elapsed before the first *concours* to elect the accoucheurs was held. It is anticipated that the same thing will happen with regard to the ophthalmologists.

The Rating of Private Hospitals

I have already mentioned[1] the various actions at law to which medical men have become liable owing to the claim of the revenue authorities to make medical men owning a *clinique* pay a professional tax calculated by adding the rental of their private house to that of the *clinique* This tax amounts to a considerable sum—namely, one twelfth of the amount of the rent and this together with the municipal dues which at Paris increase the normal tax twofold comes out at one sixth of the rent Many medical men have tried to escape this tax by registering their *cliniques* as *maisons de santé* which are taxed at a much lower rate—namely, at one-fiftieth of the rent The Conseil de Préfecture has rejected this claim on the ground that medical men give advice and carry on medical practice in their *cliniques*, whereas real *maisons de santé* are only hotels for the sick and consequently pay the hotel tax The Conseil d'État, whose decision in France is final in disputes between the Government and individuals has just set aside the decision of the Conseil de Préfecture and has declared that a distinction must be made between the occupation of a medical man and that of the manager of a *maison de santé* If the same individual carried on the two businesses in two different places he would only pay in each place the tax appropriate to the business in question In those *cliniques* where patients are supplied with medical attendance and lodging the house would be regarded as divided into two parts, according as the rooms are used for either of the respective purposes Each part will thus only pay its appropriate tax. To give an example, in a *clinique* which contains 10 sick wards, a consulting-room, and a waiting room—that is, 12 rooms in all—ten-twelfths of the total rent will supply a basis for assessing the 2 per cent tax due on a *maison de santé* and the remaining two-twelfths will be added to the rent of the medical man's private residence, and will therefore pay a tax assessed at one twelfth of the rent (*patente médicale*) This diversity of taxation for the different rooms of one and the same flat may seem grotesque, but such differential taxes are common in France and happily for the medical man the tax which affects his private residence is only charged on the rent of the rooms used for definite professional purposes For instance, a tradesman who has a shop and lives elsewhere in the town pays two different taxes—one the *contribution mobilière* on his private residence and the other the *patente* on his shop For the medical man who carries on his practice at his private residence the same distinction is to be observed and his residence is considered as divided into two parts, the one consisting of bedrooms, dining room &c, on which he pays only the *contribution mobilière*, and the other consisting of the rooms reserved for patients—namely, the consulting-room and the waiting room But the Tax Office is always wanting more and it has imposed the *patente* on the ante-room and the dining room on the pretence that these are sometimes used as extra waiting rooms In a flat where only one room in five or one room in six is reserved for patients the Tax Office has succeeded in levying the *patente* on about one room in three

The Seventh International Temperance Congress

This congress held its opening session on April 4th in the large theatre of the Faculty of Medicine, the President being M Jules Lajeuné, a Belgian senator The congress was officially recognised by the French Government, which was represented by M Jules Legrand, Under Secretary of State for the Home Department Dr Legrain, head physician at the lunatic asylum of Ville-Evrard and president of the Temperance Society of France, to whom is due the credit of having organised this congress, offered a welcome to the members who had come together in great numbers from every part of Europe There were more than 1000 persons attending the congress and 500 notices were inscribed on the orders of the day Ministers of various religious bodies took an important part in the proceedings and among them were Monseigneur Turinaz (Bishop of Nancy) and Pastor Rochat of Geneva, who read two very important papers Medical men were also present in large numbers Among the most striking communications made were those by Professor Gley, Dr Brunon, Mrs Drysdale, and one or two others Owing to differences in legislation existing in different countries and the difficulty of adopting one hard and fast rule to apply to populations living under very different social conditions the congress will hardly be able to do more than come to some general conclusion that temperance principles should be inculcated upon children while still at school This is perhaps the only thing to be done in France, a country to which the question of alcoholism is very important, for she occupies the first place in the amount of alcohol consumed per head. In some departments as, for instance, that of the Eure, there is one public house for every three inhabitants State control is practically *nil*, for in addition to the fact that restrictions upon personal liberty and licence are very badly borne it must be remembered that the State having begun by burdening alcohol with very heavy taxes has found that such taxes in no way diminish the consumption or the output of alcohol but only make manufacturers turn out a very inferior product so as to gain a larger profit, while, on the other hand, the State cannot afford to give up a very profitable source of revenue Again, Deputies are very unwilling to vote for any repressive measures directed against tavern keepers, for taverns are the recognised electoral meeting places However, the Education Minister has sent out a circular to all those establishments engaged in the education of children and also to individual

[1] THE LANCET March 4th, 1899, p 623

teachers pointing out how important it is for them to inculcate upon children from an early age a hatred of alcoholic drinks and to impress upon them by means of lectures, pictures, and the like the deadly effects of such drinks The Anti alcoholic Society now numbers some 36,000 members and its good effects are already obvious in certain departments by the complaints of travellers in alcoholic drinks who say that business has declined to next to nothing in some places

April 12th.

SWITZERLAND

(FROM OUR OWN CORRESPONDENT)

The Condition of the Appendix in Typhoid Fever

IN an inaugural thesis Miss Hopfenhausen of Lausanne has published an account of the microscopic examination of the appendices of 30 patients who succumbed to typhoid fever These cases were from four St Petersburg hospitals, and the conditions existing in the various stages of the fever could be described, as the patients had died at periods of from one to 13 weeks since the commence ment of the fever Some of the conclusions are very instructive In most cases the appendix takes part in the pathological changes due to the typhoid fever which are observed in the large intestine, this is especially marked during the acme of the illness There is mostly inflammation of the mucous membrane evidenced by cellular infiltration, rarely are specific lesions found, the latter not sufficient to produce symptoms of true perityphlitis

Microscopic Test for Small Particles of Uric Acid

The importance of diagnosis being evident in cases of gravel where very little substance is obtainable, Mr Albert Brun publishes a note on the subject Examine the particle in monobromide of naphthaline the index of refraction of which is 1 66 Compare this with indices of refraction of uric acid, 1 73, oxalate of calcium, 1 60, phosphate of calcium, 1 63, and the diagnosis becomes possible under the microscope If on raising the tube of the microscope the crystal becomes brilliant the substance under the micro scope has a higher index than the fluid in which it is immerged, it becomes darker if the substance has a lower index than the fluid The importance of the test is clear for cases requiring medical treatment or surgical interference Polarisation offers still further proof, as uric acid particles are dichroic and appear darker in polarised light than oxalates

A New Chair of Surgery in Zürich

Dr Schlatter, whose successful case of total extirpation of a cancerous stomach is well known, has been appointed as Professor to a new chair of Surgery in Zürich The patient who underwent the above operation and whose case was described fully in THE LANCET,[1] has since succumbed to general carcinomatosis, the glands of the intestines being especially affected, and Professor Schlatter intends to publish further details —Professor Krönlein, who is known in the surgical world for investigations on cerebral hæmor rhages and their operative treatment, continues to hold the post of Clinical Professor of Surgery

Zürich, April 7th.

ROME

(FROM OUR OWN CORRESPONDENT)

Noises in the Ear

AT a recent sitting of the Reale Accademia di Medicina of Turin Dr Giuseppe Gradenigo extraordinary professor of aural medicine in that school, read a paper on the above He divided noises in the ear into two great categories—first, the "subjective noises," determined by irritable conditions of the organs of hearing, and secondly, "entotic," or true noises, which have their origin in the ear itself or in its immediate neighbourhood and which may be audible even at some distance by the observer when his attention is called to them Of these latter (*i rumori entotici*) some are of purely vascular origin, others, which are the more rare, are trace- able to muscular action—due, that is to say, to clonic con- tractions of certain muscles In illustration he introduced a woman, 23 years of age, whose hearing was normal but whose temperament was neurotic and in whom, by rhythmical contractions of the volum pendulum palati and probably by similar contractions of the base of the tongue, the noises of which she complained were actually determined The patient felt them to be "extremely intense," which Pro- fessor Gradenigo and others of his colleagues present at the sitting verified for themselves They were audible at the distance of as much as half a metre, particularly when the patient held her mouth half open

Exposition of the "Hygiene of Infancy"

At Milan to-day has been inaugurated the Congress of Infantile Hygiene, at which the medical faculty was fully represented Dr Grandi, director of the Ospedale Maggiore, Professor Grossi, director of the "Brefotrofio," and others took part The proceedings, of which I shall give some account in another letter, possess peculiar interest for Italy and their tenour will have as "a running commentary in object-lessons" an Exposition which has for some days been open to the public This, according to its philanthropic promoters, "undertakes to exhibit on the amplest and completest scale possible, scientifically and practically, all those provisions which humanity and medicine have devised for the health of infancy, abandoned as it is to-day, especially in the populous centres, whether by the increasing demands of labour or by a lamentable decline in the 'instincts of family,' to mercenary wet nursing (*allatta mento mercenario*)" The enormous infantile mortality of Italy as compared with that of other countries justifies the promoters of Congress and Exposition alike in their opportune undertaking In the Exposition there are on view specimens of every instrument or utensil employed in the alimentation of infancy, the clothing of nurse and of infant in every detail, the furniture of the nursery down to the toys, object-lessons in the various systems of feeding, in rearing, in cleansing, in tendance, such as are practised in the "brefotrofi" (*foundling hospitals*), in hospitals clinical and orthopædic, and in institutions of infantile hygiene. Coöperating with the medical and educational experts among the promoters of both Congress and Exposition, the Milanese ladies, headed by the Duchessa Visconti di Modrone, are lending an effective hand and contributing in every way to enlist in the cause they have at heart the mothers of Italy in all classes of the community The whole undertaking deserves the success anticipated for it

Athletic Sports at the Medical Schools

Not only in France but in Italy the introduction of British sports is receiving hearty and healthy encourage- ment Of these, football is so far the favourite and, signi ficantly enough, it is at Turin and its great university that the game is already most popular The Professor of Physio- logy, Dr Angelo Mosso, is an enthusiastic promoter of it and already his "squadra" or team, consisting of medical students only, appears to best advantage in recent matches Dr Baccelli is scarcely less ardent as a friend of the game and in his capacity of Minister of Public In struction has instituted a prize—"la Coppa (cup) del Ministero della Pubblica Instruzione"—which was awarded on March 26th (for the second time) to the "Angelo Mosso team," victorious in a keenly contested match against a rival "squadra" composed of students of other faculties These encounters are preliminary to the formation of a crack "squadra," to be drawn from the best players of the Turinese, Genoese, and Florentine schools, which at the close of the month will meet in Turin the Swiss team selected from all the cantons which lately beat the Paris Football Club This will be one in a series of international matches which must tend to invigorate the physique of undergraduate Italy and to prove a salutary substitute for the exercises of the pistol gallery or the fencing saloon

April 8th

AUSTRALIA

(FROM OUR OWN CORRESPONDENT)

Insanity in New South Wales

THE report of the Inspector General of the Insane in New South Wales for the year ending Dec 31st, 1897, has been presented to Parliament The number of insane was 3957, an increase of 112 during the year but less than the average of the last few years From 1872 to 1891 the proportion of

[1] THE LANCET, Jan. 15th, 1898.

insane to population, though varying slightly from year to year, remained practically stationary, but during the six years from 1892 to 1897 the proportion has increased from 2 69 per 1000 to 2 99 per 1000 The number of admissions during the year was 692 also less than had obtained for several years The Inspector General, Dr Eric Sinclair, thinks the reduced number may be due to the improvement in the general condition of the colony and the recovery from the financial depression which undoubtedly was the cause of a large number of cases of insanity The number of patients discharged during the year was 327, of whom 287 recovered and 40 were relieved The deaths numbered 249, the cause of death in 134 cases being disease of the brain

The "Tana Mystery"

A case of considerable medical interest has recently been concluded in the Melbourne Criminal Court The public interest in the case which was known as the Tana Mystery" was intense, the medical interest centred in the fact that a medical man—Dr W H Gaze—was concerned, and in the doubt which existed as to the exact cause of the death of a girl named Ambrose whose body was found in a boot-box floating in the river Tana A post-mortem examination by Dr Neild showed that the girl was pregnant and that the cause of death was suffocation He could find no evidence as to how the suffocation had been produced but he suggested the possibility of the administration of chloroform He could find no evidence of attempted abortion He also gave an estimate of the girl's age which proved to be incorrect and helped to put the police off the track in identifying the body Eventually a girl named Dubberke made a confession and on her evidence the case mainly rested, resulting in a verdict of murder against another woman named Radalyski and a man named Tod and the acquittal of Dr Gaze The facts were that Tod seduced the girl Ambrose and then took her to Radalyski for the purpose of procuring abortion This was attempted by the use of an electric battery and in other ways without success Then she went in company with Dubberke to Dr Gaze and after a conversation on Dec 12th in which she explained what she had done he gave some advice On the morning of Dec 13th Dr Gaze proceeded to treat the girl again Dubberke said that she heard screams and on going to the room she found Radalyski with her hand on the girl's mouth, the girl was livid and foaming at the mouth and was dead Dubberke said that Dr Gaze had advised the injection of Condy's fluid into the womb for the purpose of procuring abortion and that he had warned them that it might cause shock and would possibly be dangerous Dr Gaze swore that he only recommended a vaginal injection of Condy's fluid to obviate sepsis Dr Neild found no trace of Condy's fluid in the vagina or in the uterus After the girl was dead the woman sent for Dr Gaze who went out to South Farm and saw the body but refused to give a certificate of death The women and Tod then packed the body in a boot-box and put it in the river Dubberke told Dr Gaze what had been done and he said that the body would float owing to the permeation of gas from decomposition Although there was the greatest public excitement over the case and large rewards were offered, Dr Gaze maintained silence until the girl Dubberke confessed Dr Gaze, whose qualifications are M R C S Eng, L R C P Lond, and M D Brux, is conducting an advertised establishment called the "Polypathic Institute" in partnership with an unqualified man named Freiman

Sanatorium for Phthisis at Macedon

Eight years ago a sanatorium for cases of phthisis was opened at Echuca, in Victoria by a number of philanthropists, but it did not receive the public support which it deserved During the summer too, the climate was too hot Now that the open air treatment is receiving so much attention the committee have established another institution at Macedon providing accommodation for 25 patients It is at a considerable elevation 2700 feet above sea level, and it has a more bracing climate than Echuca. The sanatorium is surrounded by a forest of eucalyptus and pine and is provided with numerous sun boxes The new buildings were formally opened on Feb 25th

Launceston Hospital

The last step in the Launceston Hospital difficulty has been the appointment of a conference between the paid hospital officers, the honorary consulting staff, and the chairman and vice chairman of the board, with a view of increasing the interest of the honorary staff without radically altering the present system.

Balmain Cottage Hospital

Although in Launceston the profession is agitating for the establishment of an honorary medical staff at the hospital, at Balmain, in New South Wales, a heated discussion occurred at the annual meeting of the governors of the hospital as to whether patients should be under the care of a paid or an honorary staff, the majority of the profession advocating a paid resident Finally, an amendment was carried leaving it optional with patients whether they would be treated by the paid resident staff or by the honorary staff

Amœbic Pulmono-hepatic Abscess

In the *Australasian Medical Gazette* for February Dr J C Verco of Adelaide records a very interesting case of amœbic abscess in the liver secondary to dysentery which ruptured through the diaphragm and lung Dr Verco claims that it is the first case in which the amœba dysenteriæ has been recognised in South Australia and the first one in which amœbic abscess of the liver has been proved to originate in Australia Other cases have been imported, chiefly from the South Sea Islands, but this patient would appear to have contracted the disease in the colony The amœba was discovered in the expectoration during life and in the discharge from the abscess after operation The patient died and Dr Verco takes a very unhopeful view of such cases The amœba infiltrates the tissues and causes their disintegration, and unless the parasite can be destroyed recovery seems almost impossible and the treatment of the original seat of disease in the bowel seems hopeless

March 5th.

Obituary.

JOHN FENTON EVANS, M B, C.M EDIN,

MAJOR, INDIAN MEDICAL SERVICE.

THE death from plague of Major J F Evans, Professor of Pathology in the Medical College, Calcutta, is a profound loss not only to his many personal friends but also to the Indian Medical Service

The exact mode in which Major Evans contracted the disease from which he died is not known, but he had been much exposed to the risk of infection He had been in charge of the plague wards in the Medical College Hospital ever since plague appeared in Calcutta and had made post-mortem examinations of the bodies of plague patients even up to the day upon which he himself developed symptoms of the disease The onset which was rather insidious, was probably on March 7th On the following day the symptoms were fully developed and the presence of a small glandular swelling in the right axilla left no doubt as to the diagnosis The attack was from the first a grave one, though a marked improvement in the symptoms on the fourth and fifth days of the disease led to the hope that the worst might be over Unfortunately these hopes were not destined to be realised On the evening of March 12th a marked change for the worse set in accompanied by rise of temperature and delirium, and on the following morning his condition was seen to be hopeless He passed away quite quietly at 3 P M on March 13th

Major Evans's career in the profession and in the service had been an exceptionally distinguished one He was born in 1858 In 1880 he graduated M.B and C M at the University of Edinburgh Almost immediately after graduating he joined the Bristol Medical School with the object of making a special study of anatomy and physiology In September 1881, he was chosen as medical tutor to the Bristol Medical School, and in this capacity and later as house physician and house surgeon to the Infirmary he remained connected with Bristol for five years In April, 1886 he entered the Indian Medical Service At Netley he obtained the first prize in clinical medicine and the second prize in military surgery He arrived in India in October 1886, and was for short periods of time attached to the 20th Punjab Infantry and the 39th Bengal Infantry, in Allahabad and Umballa From 1887 to 1889 he was on field service in Burmah partly with the Upper Burmah field force

and partly as staff surgeon with the Chin field force After leaving Burmah he was attached to various regiments at Mian Mir and Jubbulpore until October, 1889, when he was permanently appointed to the charge of the 18th Bengal Infantry After 15 months at home on medical certificate he returned to India in 1891 and was shortly after on field service again in the North Lushai Hills and with the Eastern Surma column For his services here he was thanked by the general officer commanding

In 1893 and again in 1894 and 1895 he held the appointments of professor of chemistry in the Lahore Medical College and chemical examiner to Government In the following year he acted as resident physician and professor of pathology in the Medical College, Calcutta—appointments to which, after acting for brief periods as civil surgeon in various stations, he returned permanently in January, 1897

Major Evans's contributions to medical literature were few, but they were always marked by extreme carefulness of observation and clearness of expression Unfortunately much of his original work and observations upon the diseases of India has not been published, but it is hoped that the notes which he is known to have left may prove sufficiently full to enable others to prevent this really valuable material from being entirely lost Among his published writings must be named a valuable report upon the deterioration of atta (flour) for which he received the thanks of Government, a report upon the field rations of the Madras sepoy, for which he was also thanked by Government, and a report upon the various poisons used for criminal purposes in India He had worked at bacteriology in Berlin and at the Brown Institution, and the result of an investigation carried out at the latter was communicated to the Royal Society in 1891 under the title "On the Demonstration by Staining of the Pathogenic Fungus of Malaria, its Artificial Culture and the results of Inoculation of the Same" He had devoted much time to the study of the malarial organism and the blood in malaria, and among his unpublished papers have been found a number of original observations upon this disease Other subjects upon which he has left valuable but, it is believed, unpublished original material, are the etiology of dysentery, the organisms of cancer and particularly their analogy with those of malaria, an undescribed nematode entozoon found in the intestines of sepoys, a new species of rhopalomyces and blood deterioration in apparently healthy individuals in malarial districts in Assam In December last he gave evidence before the Indian Plague Commission and he was personally congratulated by the Commissioners upon the interesting nature of his observations

It is easy to write of Major Evans's professional attainments, it is less easy to put into words the feelings of sorrow at his death or to attempt to appraise his personal character and worth No man was more highly more universally, or more deservedly held in esteem by all with whom he had relations, and no man was more beloved by the few who knew him intimately None was ever more conscientiously devoted to his duty to which, in the most literal sense of the words, he sacrificed his life The deepest sympathy is felt by all for his relatives in their great loss—a sympathy which is accentuated by the fact that he was very shortly to have proceeded home, and only on the day when the disease attacked him had he made the final arrangements for obtaining leave

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WILLIAM SQUIRE, M D ST AND, F R C P LOND

DR WILLIAM SQUIRE, whose death we announced in THE LANCET of April 8th, was born on Dec 1st, 1825, at Silsoe, in Bedfordshire He was the second son of William Peppercorn Squire of Silsoe and began to study medicine under the late John Bolton Hodgson of Chesham After a short pupilage he entered University College, London, in 1846 He studied medicine at the University College Hospital and was the winner of various medals and prizes, ending with the gold medal for surgery in the year 1849 In or about the year 1849 he was appointed house surgeon During his time at the hospital he administered ether for the performance of a capital operation—namely, amputation through the thigh, the amputation being performed by Robert Liston An account of this incident from the pen of Dr Squire himself appeared in THE LANCET of Dec 22nd, 1888 The operation was performed on Dec 21st, 1846 After obtaining the usual [illegible] qualification Dr Squire went to Paris where [illegible] under the [illegible] French medical men of the [illegible] at the Hopital des Enfants Malades In 1850 the systematic taking of the temperature of a patient had just begun and the instrument employed was the long stemmed axillary thermometer which attracted Dr Squire's attention On his return to England the first short-stemmed thermometer was made for him by Arnold of Smithfield

In 1851 Dr Squire was appointed medical superintendent to the St Marylebone Infirmary and administered a very complete system of centralised parochial medical relief, by which patients seriously ill could be received into the infirmary without becoming pauperised He and Dr Murchison were among the selected candidates for the first appointment of medical officer of health of St Marylebone. In 1854 Dr Squire settled in Orchard street, Portman square He became a Licentiate of the Royal College of Physicians in 1861 and a Member in 1871, and soon after took the degree of M D at St Andrews He then became physician to the St George's Dispensary, Hanover square and to the North London Hospital for Consumption and Diseases of the Chest

Dr Squire took much interest in preventive medicine and wrote a good deal on the subject as well as on infectious diseases Among his published works were "Collected Essays in Preventive Medicine," "Infection and Disinfection," and "The Prevention of Scarlet Fever and Use of Disinfectants" For Reynolds's "System of Medicine" he wrote the articles "Exanthemata," "Rubella," "Incubation," "Measles," "Scarlet Fever," and "Whooping cough," and for Quain's "Dictionary of Medicine" "Health in the Nursery and School" As secretary of the Epidemiological Society his contributions with regard to the incubation periods of different infective diseases and varying duration of infection in each disease led to renewed attention to this branch of pathology

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ALFRED THOMAS GIBBINGS, M D LOND

DR A T GIBBINGS was born at Woodbury, Devon, in 1848, but his family within a few years removed to Chichester He entered the medical profession first as a pupil of Dr Leonard Buckell of that city and then as a student at King's College of which he became an associate, scholar, and prizeman He took the diplomas of M R C S Eng and L S A in 1869, subsequently graduating as M B Lond in 1870 and M D in 1874 After becoming qualified he was for a time house surgeon to the Stamford, Rutland, and General Infirmary He then entered on private practice in partnership with Dr Daly and Dr Long of Dalston, N E, and at the time of his death was a member of the firm of Daly, Gibbings, and Hunt For two years he had had reason to suspect degenerative change in the cardiac muscular tissue, but he consulted no one, having resolved to work to the end and live his life in his own way During the past winter his practice was unusually onerous partly from the prevalence of influenza and partly from the multiplication of his duties as a public vaccinator by the legislation of last year He greatly felt the strain and his appearance caused anxiety to his friends In the weeks preceding Easter he had been attending, among other patients, three cases of pneumonia in one house On March 31st he was himself in a febrile condition This continued but he could not be persuaded to relinquish work until April 3rd On April 4th symptoms of pneumonia were evident and he died on April 9th Dr Gibbings's chief characteristics were his cheerful, happy temperament, his unfailing kindness, his strict integrity, his simple straightforwardness, and his dislike of ostentation He took so strong an interest in his profession that he enjoyed his practice, taking not merely a scientific but a human interest in his patients, by whom he was in consequence trusted and beloved to no common degree He had the esteem and goodwill of every medical man without exception in his neighbourhood as well as the warm friendship of those who knew him intimately

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DEATHS OF EMINENT FOREIGN MEDICAL MEN —The deaths of the following eminent foreign medical men are announced —Dr Waldo van Arsdale, Professor of Surgery in the New York Polyclinic —Dr J A Benson, Professor of Physiology in the Chicago College of Physicians and Surgeons —Dr Lucas, a medical officer of high rank in the French navy —Dr Girard, a Marseilles Physician of eminence —Dr Arthur Ramlot, a well known Brussels Practitioner

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in the subjects indicated —

Thursday, April 6th

Anatomy and Physiology.—Thomas Corrie Rutherfoord, St. Thomas's Hospital Carrick Hey Robertson, William Henchman Cole, George Herbert Hind Manfield, Alfred Herbert Edwin Wall, William Edward James Tuohy, Joseph Tremayne Hicks, and Edgar Faulks, Guy's Hospital John Henry Douglas Bolton, Harold Ashton Lyth George Francis Innes Harkness and Charles Alwis Hewavitarne, University College, London Harold Farley Seymour and Moses Thomas Williams, London Hospital Charles Frederick Day Charles Jerome Alexander Nicolai Mercier and James Couper Charing Cross Hospital, Edward Augustine Bell, King's College, London Gerald Stephen Hughes and William Arthur Rees, Middlesex Hospital George Tatham Davison Elder Cambridge University and St. Mary's Hospital and Frank Herbert Noke and Thomas Crofts Neville, St. Bartholomew's Hospital.

13 gentlemen were referred in both subjects.

Friday, April 7th

Anatomy and Physiology.—Charles Uncles Ind, St. Thomas's Hospital Julius Harold Hurst, Yale University and St. Thomas's Hospital Albert Edward Pinniger and Dansey Smith, Middlesex Hospital Lennard William Forsyth, Cambridge University and Middlesex Hospital; Ernest Roberts Frank Leslie Thomas Marcus Woolf Cohen, Harold Thornbury Palmer Kenneth Anderson, and Thomas Morland Smith, Guy's Hospital Forbes Manson Grant Tullock, Hugh Marcus Major, and Frederick Samuel Langmead, St. Mary's Hospital Robert Hammersley Lee King's College, London Leonard Robert Tosswill Lionel Cecil Ferguson, Norman Macfadyen, Noel Everard Waterfield, and Lawrence Galsworthy St. Bartholomew's Hospital John Jones, London Hospital and James Weeden Woodhams Adamson, St. George's Hospital.

Anatomy only.—Ernest William Toulmin, St. Mary's Hospital and Stanley Bean Atkinson, St. Bartholomew's Hospital.

Physiology only.—Francis John Russell, London Hospital and Urban Morris Asplin, Cambridge University and King's College, London.

13 gentlemen were referred in both subjects, four in Anatomy only, and two in Physiology only

The following gentlemen passed the First Examination of the Board under the "Four Years" regulations in the subjects indicated —

Part I., Chemistry including Chemical Physics.—Ricardo Adolfo Robinson, University College and the School of Science, Technology and Art, Liverpool.

Part II., Materia Medica and Pharmacy.—Walter Seymour Armstrong, St. George's Hospital James Ross Clements, Jefferson Medical College, Philadelphia, Cambridge University and St. Thomas's Hospital Alfred Gentel, St. Mary's Hospital Major Byron Oliver University College, London and Elijah Richard Lockwood Thomas, London Hospital

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Preliminary Science Examination for the Licence in Dental Surgery —

Chemistry Physics and Practical Chemistry.—Harold Chapman Bernard Swale Dewhurst, and Herbert Cragg Highton, Victoria Science and Art School, Southport; Leonard Myer and Walter Sidney Rose, Birkbeck Literary and Scientific Institute, John George Morrell, High School, Middlesbrough and Thomas Stordy The Harris Institute, Preston.

14 gentlemen were referred for three months.

SOCIETY OF APOTHECARIES OF LONDON.—At the primary examination held in April the following candidates passed in the subjects indicated —

PART I

Biology.—E. J. Howes and A. J. O'Leary, Liverpool, D. Roberts University College Hospital E. P. Turner Birmingham and E. N. L. Wilson, Royal Free Hospital

Chemistry.—A. J. Ambrose Westminster Hospital, L. Denny Royal Free Hospital G. P. K. Grey, Middlesex Hospital E. M. Handley Royal Free Hospital E. J. Howes, Liverpool A. H. Muirhead, St. Bartholomew's Hospital; A. J. O'Leary Liverpool H. G. Peel Leeds and Z. Bowlands and E. N. L. Wilson, Royal Free Hospital.

Materia Medica and Pharmacy.—St. C. G. Ballenden, Birmingham T. Burdekin, University College Hospital; J. C. S. Dunn, St. Bartholomew's Hospital A. B. Dunne, Cambridge and Leeds F. R. Featherstone Guy's Hospital T. L. A. Jones, Cardiff A. J. O'Leary, Liverpool and G. H. Watson, St. Bartholomew's Hospital.

PART II

Anatomy.—J. M. Barlet, St. Mary's Hospital, J. H. Bennett Birmingham C. C. Bernard Royal Free Hospital W. E. Cuthbertson, Bristol and Glasgow; H. J. Gater Guy's Hospital S. K. K. Haslam Royal Free Hospital; F. Heffer, Cambridge S. F. Hickman, Royal Free Hospital G. W. C. Hollist, Guy's Hospital; R. L. Jones, Cambridge and Middlesex Hospital A. Kellgren, Royal Free Hospital; J. M. King Edinburgh and University College Hospital C. E. H. Leggatt, St. Mary's Hospital F. Marriott, Edinburgh; J. L. Martin St. Mary's Hospital; A. E. Maturin Guy's Hospital; O. C. H. L. Moll, Durham and Guy's Hospital G. Raymond, St. Thomas's Hospital D. Roberts, University College Hospital W. Thorp, Royal Free Hospital and J. E. Turle, University College Hospital.

Physiology.—J. M. Barlet, St. Mary's Hospital J. H. Bennett, Birmingham C. C. Bernard, Royal Free Hospital H. J. Crew Guy's Hospital, S. R. Dudley St. Bartholomew's Hospital H. J. Gater Guy's Hospital F. Heffer, Cambridge S. F. Hickman, Royal Free Hospital G. W. C. Hollist, Guy's Hospital R. L. Jones, Cambridge and Middlesex Hospital F. P. Joscelyne, Leeds A. Kellgren, Royal Free Hospital C. E. H. Leggatt, St. Mary's Hospital N. Lipscomb, St. Bartholomew's Hospital F. Marriott, Edinburgh J. L. Martin, St. Mary's Hospital H. Mills, St. Bartholomew's Hospital O. C. H. L. Moll, Durham and Guy's Hospital D. Roberts, University College Hospital W. Thorp, Royal Free Hospital J. E. Turle, University College Hospital and F. J. Turner Guy's Hospital.

UNIVERSITY OF GLASGOW.—The following have passed the first professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (B., Botany, Z., Zoology, P., Physics, and C. Chemistry) —

Robert Adam (Z., C.) James Richard Sunner Anderson (B., Z., C.) George Beattie (Z., C.), Archibald Grainger Bisset (C.), William Robertson Blackwood (B., P., C.), John Shaw Monahan Bogle (Z.) William Thomas Bolton (Z., C.), Robert George Bradford (Z.), James Campbell Bringan (P.), Thomas Brodie (B.), John Brown (B., Z.), Carl Hamilton Browning (Z. C.) Robert Bruce (C.), Robert Harold Campbell (Z.) Thomas Murdoch Campbell, M.A. (Z.), Alexander Adam Carruthers (B., Z.), Robert Peploe Cartwright (B. C.) Andrew Connal (Z.), Thomas Goodall Copestake (B., Z., P.) John Craig Crawford (Z., C.), John Cross (B. Z.), Weir Burns Cunningham (Z.,* C.) Hugh Collin Davies (B., Z., P., C.), Mitchell Innes Dick (P., C.), David Dickie (Z., C.), David Garfield Dykes (Z. C.), James Eadie (Z.,* C.) James Ferguson (B., C.) Gunnison Charles Finlator (Z., C.), William Macmillan Gilmour (Z.), George Gordon (C.) Alexander Greig (Z. C.), John Hanson, M.A. (Z. C.), Saul Hyman Harris (B.) William Harvey (Z. C.) John Monnette Huey (B. P.), John Gordon Hume (B., Z., C.*), Alexander Hunter (B. Z.) James Thompson Kelly (B., C.), John Muir Kelly (Z. C.), John Kerr (Z. C.) Robert Laurie (B., C.) Alexander Leggat (P.), Robert Thomson Leiper (Z. C.), Richard Makins (B. P.), Peter Millar (Z.,* C.), William Alexander Milne (P.), Alexander John Mitchell (Z., P.), David Robertson Mitchell (Z. C.), Spencer Mort (Z. * C.*), John Baird Morton (Z., C.), Gavin Muir (Z.), Gavin Denholme Muir (Z.), Alexander Hugh Munro (Z.) John Bertram M'Cabe (C.) James Duff M'Culloch (Z., C.), Joseph Glaister M'Cutcheon (Z.), David Duncan Fraser Macintyre (Z. C.) Charles Gordon Mackay (Z.*), John Matheson M'Kellar (P., C.) John Chancellor M'Kenzie (C.), Alexander Stewart M'Millan (Z.), Norman Thomas M'Murdo (Z.), Norman Smith MacNaughtan (B., Z.), James Roy M'Vail (C.) James Anthony Macvea (Z. * P.) Andrew Alexander M'Whan (B.*), David Penman (B. P.), William Murdoch Rae (B. P.), George Raeburn (Z. C.) William Rankin (B. Z., P., C.), George Richmond (B. Z. P. C.), Peter Hamilton Robertson (Z. C.), Campbell Ross (Z.), James Russell (P.), Robert Clemens James Schlomka (B. P.) William Garrow Shand (Z.,* C.) John Macgregor Smith (Z. * C.) James Alexander Somerville (B. P.), John Stevenson (B. Z.), John Black Stevenson (Z., C.), William David Henderson Stevenson (Z. * C.), Norman Burgess Stewart (Z.), Arthur William Sutherland (Z., P.*) John Wilson Sutherland (Z. C.), Peter Lindsay Sutherland (Z., C.*), John Allan Thom (B.), Joseph Walker, M.A. (Z. P.) George Wallace (C.), Alexander M'Millan Watson (Z.) William Norman West Watson (Z.) Alexander Brown Watt (C.), Robert Tait Wells (B. C.), John Forrest Weston (B.), James Wilson (Z., C.) Eldred Wright (Z. C.), Hugh Young (Z. P.) and John Young (Mount Vernon) (Z., C.)

Women.—Jeanie Auld (P., C.), Annie M'Caig Black (P., C.) Agnes Wallace Cameron (P., C.), Mary Charlotte Cameron (C.) Jessie Galloway Duncan (P. C.) Jane Reid Foulds Gilmour (C.) Margaret Hardy (P. C.) Anna Pollock Martin (P., C.) Eliza Jane Miller (P., C.), Isabel Deane Mitchell (P.), Jane Hamilton M'Ilroy M.A. (Z. C.), Alice Wesley Maclean (C.) Ethel Jane Mildred Pryce (C.), Margaret Hossack Smart (B., P.), Jessie Marie Stewart (P.), Elisabeth Taylor Tsibert (B. C.) and Janet Gardner Waddell (B.)

* Passed with distinction.

The following have passed the second professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (A., Anatomy, P., Physiology, and M., Materia Medica and Therapeutics) —

John Anderson (A.), Thomas Anderson (A., P.), William Archibald (P.) Robert Wellwood Auld (A. P.*), John Stoddart Barr (A., P.) Alexander Birch (A.), William Macalister Brown (A.,* P.* M.*), Patrick Thomas Cairns (A.), Samuel James Cameron (A. * P.), John James Young Campbell (M.) Robert David Campbell (A., P.), Edward Seymour Chapman (A.), George Herbert Clark (P.), James Bertie Wylie Cook (A. P.), James Craig (A. M.), Andrew Currie (A., P.), David Beattie Davidson (A. P.), James Davidson, M.A. (M.), Frank Lindsay Dickson (A.), Reginald Nairn Dunlop (A., P.), William Watt Farrar (A., P.) George Ferguson (A., P.), Duncan Johnston Fletcher (A.) David George Somerville Gartshore (A.), James Gemmell (P.), John Ritchie Gilmour (P.), William Girvan (A. P.), James Dickson Gourlay (M.), Archibald Gow (A., P.), John Gracie (M.), Andrew Parlane Granger (A. M.), John Gregor (A. P.) George Pillans Harlan (A. P.), Leslie Charles Broughton Head (A., P.) Francis Joseph Henry (A., P.), Charles Milburn Hope (M.*), Douglas William Hunter (A. P. M.), Matthew Hunter (A. P.), William Johnstone Isbister (A., P.), Pierce Jones (P.), William Bryce Kerr (A., P.) Daniel Ross Kilpatrick (A., P.) Alexander King (P. M.), James Dickson Laidlaw (M.) John Lambie (M.), John Francis Lambie (A., P.), Alexander Leitch (M.), Francis Joseph Lochrane (A., P., M.), David Longwill (M.*), Edward Magoveny (A. P., M.*), William Alexander Masson (A., P.), William Archibald Mills (A., M.) William Alexander Milne (A., P., M.*),

Alexander Robert Moir (A., P.), Alan Howie-Muir (A. P.) Walter James M'Feat (M.), William Ferguson M Glashan (A., P.) Thomas M'Laren (M.), George Williamson M'Millan (P.), James M Pherson, M A. (M *) Robert Orr (A.) Robert Paterson (M.) John Paton (A., P.) James Nimmo Prentice (A., P.), Robert Ramsay (A. P.), Thomas Hood Rankin (M.), Andrew Reid (P.) William Robertson Kilmarnock (A., P.), Thomas Ritchie Rodger (A. P.) William George Rodger (A., P.), Norman Cumming Rogers (A.), Andrew Taylor Ross (A.), Charles James Ross, B A (A. P. M.), Edward Henry Ross (M.) Andrew James Smith (P.) James Smith (P.) David Spence (M.), Donald Steel (A., P.*) Andrew Stewart (A.) John Stewart, M.A. (P.) Robert Rennie Swan (P.), Robert Bryers Thom (A.), James Nathannel Todd (A. P.), Joseph Goodwin Tomkinson (A. P.), John Turnbull (A., M.) William Dinning Walker (M.*), George Smith Wallace (A. P.) Peter Millar Waugh (M.) Robert George White (A. P.) Morgan Watkin Williams (A.) David Ashley Wilson (A.) James Wilson (M.) William Webster Watt Wilson (M.) Robert Wylie (A.), and William Robertson Wylie (A. P. M.)

Women—Martha Adams (A., P. M.) Daisy Annabella Murdoch Clark B Sc. (M *) Helen Mary Gordon (A.) Catherine Spence Howden (M.), Janet Thomson Miller (M.), Alice Moorhouse (A., P.) Mary Janet Pirret (A. P. M.*), Mary Emma Potter (M.), Margaret Mitchell Ritchie (M.), Mary Ann Thompson Ritchings (A.) Agnes Rankier Sloan (P., M.*) Elizabeth Macfarlane Sloan (P., M.*) Elizabeth Helen Smith (M.), and Henrietta Fraser Young (L. P.)

* Passed with distinction

UNIVERSITY OF ABERDEEN—The following degrees and diploma have been conferred—

Degree of Doctor of Medicine (M D)—*William Findlay, M A., M B Aberdeen George Alex Reid M B Bournemouth George Savege M B Beverley Yorks Aaron M Sims M B Sparkbrook, Birmingham and Robert B. Tydd Stephenson M B Berbice British Guiana

* Thesis considered worthy of commendation

Degrees of Bachelor of Medicine (M B) and Master in Surgery (C M) (Old Ordinances)—Robert Alexander Batchan Ruthwell, Dumfriesshire Leonard Cotterill Weybridge, Surrey Alexander Brown Cruickshank Aberdeen John Hailey Aberdeen Donald Mackenzie Fairburn Muir of Ord, Ross shire Richard Norris Petrie Alford Aberdeenshire Alex Charles Profeit, Dinnet, Aberdeenshire and Joseph Sebastian de Silva Moratuwa, Ceylon

Degrees of Bachelor of Medicine (M B) and Bachelor of Surgery (Ch.B) (New Ordinances)—Alex Henderson Cran M A. Nigg Ross-shire, James Matthews Duncan, M A., Aberdeen Cecil Vivian Moore Etienne Le Fanu, Cassel Germany ‡George Alexander Finlayson M A. Aberdeen John Charles Galloway M A., Oyne, Aberdeenshire Arthur Norman Haig M A. Ahmednagar Bombay India Charles Hunter M A., Rothie-Norman Aberdeenshire Francis Alex Innes M A., Skene Aberdeenshire John Wm Lindsay M.A Peterculter Aberdeenshire James Henderson Mackay M A Aberdeen John McPherson Aberdeen ‡George Alexander Mavor M A Aberdeen; Alex Mennie Mitchell, M A., Old Rayne, Insch, Aberdeenshire Charles Murray M A., Aberdeen Alex Bruce Simpson, Alford Aberdeenshire, James Alex Stephen M.A. St Andrews—Lhanbryd Elgin ‡Lessel Philip Stephen, M A., Inverurie William Edward Taylor Aberdeen James Alex. Tolmie M.A. Glenglassaugh Portsoy Banffshire, and John Horne Wilson, Aberdeen

† Graduated with honourable distinction.

‡ Passed Final Examination with credit.

Diploma in Public Health—§Alexander Keith Campbell M.B (Edin) Montrose, Wm. Ironside Moir M B. (Aberd), Aberdeen and Wm. Henry Neilson, M B (Aberd), Major Indian Medical Service

§ With credit.

Degree of Bachelor of Science (B Sc.)—David M Gall, Carnoustie (with special distinction in Geology), Charles D Rice, M.A., Aberdeen (with special distinction in Chemistry) and George I T Stewart, M B Ch B Banchory, Aberdeen (with honours, under old regulations)

HOSPITAL SATURDAY FUND—The twenty-fifth annual report published at the office of the Hospital Saturday Fund, 54, Gray's Inn road, W C, shows that the total income during 1898 was £19 148 as against £20,138 in 1897 The total sum awarded was £17,029 to 173 institutions as against £17,627 to 169 institutions in 1897 The two highest awards to individual institutions were £879 to the London Hospital and £408 to the Middlesex Hospital The four highest collections received from the employés of individual establishments were £595 from the Royal Arsenal, Woolwich, £385 from the General Post Office and branches £215 from the South Metropolitan Gas Company, and £174 from the Army and Navy Coöperative Society, Limited Mr R B D Acland, chairman of the Fund, has resigned that position and has been elected a vice president In his annual address he states that although the street collections were abandoned in 1898, yet the sum distributed was almost, if not quite, equal to the largest sum distributed prior to 1897 The new chairman is Mr E M Bonus Hospital Saturday this year will be Oct 14th

LITERARY INTELLIGENCE—Mr J Y W MacAlister, the librarian of the Royal Medical and Chirurgical Society, is engaged upon a collective biography of the principal medical men of the nineteenth century. There is little that is new to be said of those belonging to the first half of the century, but Mr MacAlister's close acquaintance with the profession at the end of the century should make the work authoritative as well as interesting Messrs Macmillan are the publishers

THE SOCIETY OF CHEMICAL INDUSTRY—Dr Thudichum read a paper before this society on Monday last, entitled, "The Industrial Technical Treatment of Sherry and of British Colonial Wines," which was stated to be a reply to our Commission on the "Production, Composition, and Character of Sherry" We await with interest the publication of Dr Thudicum's paper

THE NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY—The annual dinner of this society took place in the Venetian Room of the Midland Grand Hotel on Thursday, April 6th, and was a thoroughly successful function Mr Frank Godfrey, the President, took the chair, and was supported by Dr Glover, Dr Rose Bradford, F R.S, Mr C B Lockwood, and Mr H W Allingham among others The toast of the evening, "The North London Medical and Chirurgical Society," was responded to by Mr Lockwood who in a speech of considerable vigour desired to infuse into the society "a healthy spirit of discontent with itself" He did not say that the society was doing badly, but he said very clearly that he thought it should do better, and the same sentiment peeped out in the words of several other speakers Dr Glover proposed "The Sister Societies," which toast was responded to by Dr Rose Bradford, and Dr R W Burnet proposed "The Guests," for whom Surgeon General Don made suitable reply Dr G de B Watson and Dr W A Malcolm were much applauded for the songs with which the speeches were interspersed, as was Mr P Tracy Harris for a flute solo

PRESENTATIONS TO MEDICAL MEN—At the usual fortnightly meeting on March 29th of the Loyal St George Lodge, No 3840, I O O F Manchester Unity, Mr. F Turtle, M D St And, M R C S Eng., on his retiring from the post of medical officer after 32 years' service, was the recipient of an address on vellum with a gold frame and an ebony walking stick with silver band on which is engraved, "Presented to Dr F Turtle by the 'St George' Lodge, No 3840, M U I O O F, March 29th, 1899"—On March 31st Mr Robert Marshall, L M Dub, L S A., of Douglas, Isle of Man, was presented in the Guild Parlour at Rosemount by members of his ambulance classes with a token in recognition of the care with which he had instructed the classes as lecturer—On March 25th in the theatre of the Belfast Royal Hospital an address and valuable collection of instruments were presented to Dr Alexander Montgomery, the senior house surgeon, on the occasion of his resignation The presentation was given by the students, not only by those who were resident with Dr Montgomery and the members of his clinical class but also by all the students attending the hospital—On March 25th Mr R H Edmondson, the manager director of the Garswood Hall Colliery Company, Ashton, distributed certificates to the successful candidates in the recent examination held under the auspices of the St John Ambulance Association and afterwards on behalf of the local class presented Mr W Latham, L R C P Irel, M R C S Edin, the instructor, with ten volumes of "Chambers's Encyclopædia"

Parliamentary Intelligence.

HOUSE OF COMMONS

MONDAY APRIL 10TH.

Lead Poisoning

MR. M KENNA asked the Home Secretary whether his attention had been called to the conclusions arrived at by Professor Thorpe and Professor Oliver in their report on lead compounds in pottery, and whether in view of those conclusions, the Factory and Workshop Bill which he had stated his intention to introduce this Session would contain provisions for prohibiting the use of lead for glazing earthenware in those particular kinds of ware in which it had been proved to be unnecessary for prescribing the use of lead in the form of a fritted double silicate for prohibiting the use of raw lead and for prohibiting the employment of young persons and women as dippers, dippers assistants, ware cleaners after dippers and glost placers in factories where lead glaze was used.—Mr JESSE COLLINGS replying to the question said: The Secretary of State is fully cognisant of the conclusions embodied in the report referred to which was made to him and presented by him to Parliament. The Bill to amend the law relating to factories and workshops which he has prepared will propose to give power to the Secretary of State to deal under certain conditions with all the points mentioned by the hon. Member

London Water Question.

At this sitting of the House the Bill of the Government with regard to intercommunication and interchange of supply in case of emergency between the different metropolitan water companies was passed through the Committee stage without amendment of any kind being made.

TUESDAY, APRIL 11TH.

Treatment of Inebriates in Scotland.

The LORD ADVOCATE, replying to a question on this subject addressed to him by Sir JOHN LENG, said that the local authorities in Scotland have been duly informed by the Secretary for Scotland as to the regulations formulated by him for the use of certified inebriate reformatories, but that as yet he has not received any applications for the establishment of such a reformatory. Her Majesty's Government propose to defer the expenditure required for the establishment in Scotland of a State inebriate reformatory until experience has been had of the operation of the new legislation and the permanent demand. It is likely that such an institution will have to be set up.

WEDNESDAY, APRIL 12TH.

Midwives Bill.

At ten minutes past five o'clock—that is to say, when only 20 minutes remained for the discussion of contentious business—the order for the second reading of the Midwives Bill was reached.

Mr. A. DE TATTON EGERTON, in a short speech, moved that the Bill be read a second time in order, he said, that it might be referred to a committee. The Bill, he explained, was the result of an inquiry made by a Select Committee in 1893. The subject with which it dealt was one of immense interest to the whole country because it affected the youth and the mothers of the country and the disclosures made before the Select Committee in 1893 as to the inefficiency of midwives were such that an influential committee was formed which had been working ever since to get a Bill passed. The Bill now, he believed, had received the acceptance of the medical profession through its heads—the Royal College of Surgeons of England and the Royal College of Physicians of London—and it had been favourably considered and received by the General Medical Council.

Mr. T. P. O'CONNOR said that he hoped the hon. Member did not think of pressing a Bill of this importance when the House had only 20 minutes to discuss it. The right thing to do would be to postpone the order to a more convenient time. He could not say that his information about the opinion of the medical profession agreed with that of the hon. Member, for he had strong reason to believe this Bill met with very vehement opposition from a large and very influential section of the medical profession. In fact, one of the Direct Representatives of the profession on the General Medical Council had strongly and openly declared himself against the provisions of the Bill. As the hon. Member had not explained the Bill he might say that it would create a number of registered midwives upon whom it would confer very large privileges and titles. The medical profession, and especially the practitioners in small country districts, were strongly of opinion that this would have the effect of substituting inexperienced, unpractical, and untrained attendants upon women, instead of experienced, practical, and trained attendants. Undoubtedly the first result would be to induce a large number of women not to employ the small country practitioner but the midwife registered under this Bill, and he could not help thinking that the consequences of this would be most disastrous to the well-being of the community. In order to be thoroughly acquainted with the subject of midwifery a training of at least three years was required by a medical man, and it was only after this training of three years that he was in a position to attend an easy case, far from anything like complication. What would happen if the Bill became law? This registered midwife would be called in after a very [illegible] of three or six months of perfunctory training she would undertake all the duties, face all the difficulties and run all the risks that required the skill and attention of a medical man who had gone through a regular course of training. Under this Bill the midwife would be called, not as an assistant to the qualified medical man, but as a substitute for him. The midwife was a very good assistant, but to make her a substitute was, in his opinion, to expose a very large number of mothers in this country to very serious danger. Then, again, this Bill struck at the assistance given so often by the friendly neighbour. He had that the Bill would stop this [illegible] altogether. Having [illegible] this he thought that he had said enough to make good the point that this was an important Bill and could not be adequately discussed in the time now at their disposal. He therefore moved that the debate be adjourned.

The SPEAKER said that in the circumstances of the case he could not accept such a motion.

Mr. T. P. O'CONNOR: Then I move the rejection of the Bill.

Mr. GALLOWAY said he would like to know from the hon. Member who had moved the second reading the nature of the committee to which he proposed to refer the Bill.

Mr. A. DE TATTON EGERTON: The Grand Committee.

Mr. GALLOWAY said he objected to the Bill going to the Grand Committee, his opinion being that a measure of this importance should be considered by the committee of the whole House. He agreed with the view that the Bill would have in many cases the effect of substituting the midwife for the qualified medical man and [illegible]. He thought the measure was altogether unnecessary [illegible]. He therefore supported the motion for its rejection.

Sir WILLIAM PRIESTLEY said it was quite true that there was a certain amount of objection to the Bill on the part of a certain section of the medical profession, but he could not help thinking that the danger of this Bill to the interests of the medical practitioner had been very much exaggerated. The object of the measure was really to do something in the interests of poor women both in town and country to see that they were provided with properly skilled women who would be called midwives. No one could be more unwilling than he was to inflict any hardship upon the general practitioner—the man upon whom the poor depended in all their emergencies for aid and succour—but he thought that the danger to the general practitioner had been greatly exaggerated. In every country in Europe there were State regulations for midwives and these did not in the least degree interfere, as he understood, with the practice of medical men among the poor. That he considered an important point.

It was now within half-past five o'clock when by the operation of the rules of the House, the debate stood adjourned.

Seats for Female Shop Assistants.

At this sitting of the House a second reading was given to a Bill introduced by a private Member providing that in Scotland female shop assistants shall be accommodated with seats, the proportion being no less than one seat to every two assistants employed in each room.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

ASHTON, W. C., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the East London Hospital for Children and Dispensary for Women, Shadwell, vice Stuart B. Reid, resigned.

B[illegible], A. E., L.S.A., has been appointed Clinical Assistant to the Chelsea Hospital for Women, Fulham-road, London, S.W.

CHAL[illegible], A. K., M.D. Glasg., D.P.H. Camb., has been appointed Medical Officer of Health to the [illegible] Council.

COLLIER, JOSEPH, M.B., B.S. Lond., F.R.C.S. Eng., has been appointed an Honorary Assistant Surgeon to the Royal Infirmary, Manchester.

C[illegible], R. J., L.S.A., has been appointed, *pro tem.*, Medical Officer at Obon[illegible], Ashanti, West Africa.

DA[illegible], W. H., M.R.C.S., has been re-appointed Medical Officer by the Culmstock Rural District Council.

FENWICK, P. C., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Surgeon to Christchurch Hospital, New Zealand.

GAYLOR, EDWARD, L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed Medical Superintendent to the Belper Joint District Isolation Hospital.

GIMBLETT, W. H., M.D. Durh., has been appointed Medical Officer of Health to the Buckhurst Hill Urban District, vice H. Brown, resigned.

GODFREY, C. G., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., M.R.C.S., has been appointed Senior Medical Officer of Hospitals for the Insane, Queensland, vice L. W. Lethbridge.

GRAHAM, F. M., F.R.C.S., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer to the Whitmore Sanitary District of the Newcastle-under-Lyme Union.

HAMILTON, A. J., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer, Queenstown Hospital Union, Tasmania, vice T. E. Abbott, resigned.

HEPWORTH, A. F., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Officer of Health for Tungamah Shire, Victoria, Australia, vice E. J. Connell, resigned.

HILL, CHARLES A., M.B., B.C., B.A. Cantab., M.R.C.S., has been appointed Assistant to the Bacteriologist to the Royal Commission on Sewage Disposal.

HILL, E. P., M.B., C.M. Edin., has been appointed Medical Officer at Isisford, Queensland.

JONES, HUGH EDWARD, M.R.C.S., L.R.C.P., has been appointed Honorary Surgeon to the Liverpool Eye and Ear Infirmary.

LETHBRIDGE, R. W., M.B., Ch.M. Edin., has been appointed Medical Superintendent to the Ballarat Lunatic Asylum, Victoria, Australia, vice W. H. Barker.

McCLELLAND, H. A., L.R.C.P. Lond., L.R.C.S., has been appointed Surgeon for the New Plymouth Prison, New Zealand, vice P. J. O'Carroll, retired.

McCREERY, J. V., L.R.C.S. Irel., has been appointed Inspector of Hospitals for the Insane, Victoria, Australia.

McELLIGOTT, MAURICE G., D.P.H., L.R.C.P. & S. Irel., has been appointed Deputy Medical Superintendent at the Belper Joint District Isolation Hospital.

MACGREGOR, P., L.R.C.P., F.R.C.S. Edin., has been appointed Honorary Surgeon to the Huddersfield Infirmary, vice S. Knaggs, resigned.

MACLAREN, J. P., M.A., M.B., C.M., has been appointed Clinical Assistant to the Chelsea Hospital for Women, Fulham-road, London, S.W.

McMAHON, F. D. SUTHERLAND, L.R.C.P. & S. Edin., has been appointed Medical Officer by the St. Columb Major Rural District Council.

MACTIER, G. J., M.B., has been appointed Clinical Assistant to the Chelsea Hospital for Women, Fulham-road, London, S.W.

MARTIN, R. C., M.R.C.S., L.R.C.P., has been appointed Junior House Surgeon to the Great Northern Central Hospital, Holloway-road, London.

MILLIGAN, WILLIAM, M.D., has been appointed Honorary Aural Surgeon to the Royal Infirmary, Manchester.

MONSARRAT, KEITH W., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Children's Infirmary, Liverpool.

MOORE, H. C., M.R.C.S., has been appointed Medical Officer of Health by the Hereford Town Council.

[illegible], A., M.D., Ch.M. Aberd., has been appointed, *pro tem.*, acting Medical Superintendent of the Reception Asylum, Dunwich, Queensland, and also Medical Officer for the Lazarette on Stradbroke Island.

[illegible], W. E., M.B., C.M. Edin., has been appointed, *pro tem.*, acting Medical and Health Officer [illegible], Queensland.

O'DOHERTY, E. H., L.K.Q.C.P. Irel., L.R.C.S., has been appointed, *pro tem.*, acting Medical Superintendent, Peel Island Quarantine Station, Queensland, and also Public Vaccinator, Officer Visitor to the Hospital for the Insane at Goodna, and Official Visitor to the Reception House, Brisbane.

PARKER, GEORGE, M.A., M.D. Cantab., M.R.C.S., has been appointed Joint Lecturer on Medical Jurisprudence at University College, Bristol, vice A. J. Harrison, resigned.

PHILLIPS, F. E., L.F.P.S. Glasg., L.R.C.P. Edin., has been appointed, *pro tem.*, acting Health and Medical Officer and Visiting Gaol Surgeon at [illegible], Queensland.

PURNELL, RICHARD, M.D. St. And., M.R.C.S., L.S.A., J.P., has been re-appointed Medical Officer of Health for [illegible], Somerset.

Alexander Robert Moir (A., P) Alan Howie-Muir (A., P) Walter James M'Feat (M.), William Ferguson M Glashan (A., P) Thomas M Laren (M), George Williamson M Millan (P), James M'Pherson M.A. (M *) Robert Orr (A.) Robert Paterson (M), John Paton (A., P), James Nimmo Prentice (A., P) Robert Ramsey (A. P), Thomas Hood Rankin (M) Andrew Reid (P), William Robertson Kilmarnock (A. P.), Thomas Ritchie Rodger (A. P) William George Rodger (A, P) Norman Cumming Rogers (A), Andrew Taylor Ross (A.), Charles James Ross, B A. (A. P, M), Edward Henry Ross (M) Andrew James Smith (P) James Smith (P) David Spence (M) Donald Steel (A P *) Andrew Stewart (A) John Stewart, M.A. (P), Robert Rennie Swan (P) Robert Bryers Thom (M), James Nathanael Todd (A. P), Joseph Goodwin Tomkinson (A. P), John Turnbull (A. M) William Dinning Walker (M *), George Smith Wallace (A P) Peter Millar Waugh (M) Robert George White (A. P) Morgan Watkin Williams (A) David Ashley Wilson (A.) James Wilson (M) William Webster Watt Wilson (M) Robert Wylie (A) and William Robertson Wylie (A P M.)

Women—Martha Adams (A., P M) Daisy Annabella Murdoch Clark, B Sc. (M *) Helen Mary Gordon (A.) Catherine Spence Howden (M), Janet Thomson Miller (M) Alice Moorhouse (A P) Mary Janet Pirret (A. P M *) Mary Emma Potter (M), Margaret Mitchell Ritchie (M), Mary Ann Thompson Ritchings (A) Agnes Bankier Sloan (P M *) Elizabeth Macfarlane Sloan (P M *) Elizabeth Helen Smith (M) and Henrietta Fraser Young (A. P)

* Passed with distinction.

UNIVERSITY OF ABERDEEN—The following degrees and diploma have been conferred—

Degree of Doctor of Medicine (M D)—*William Findlay, M A., M B, Aberdeen George Alex Reid M B Bournemouth George Savage M B Beverley Yorks Aaron M Sims M B Sparkbrook, Birmingham and Robert B Tydd Stephenson M B Berbice British Guiana

* Thesis considered worthy of commendation

Degrees of Bachelor of Medicine (M B) and Master in Surgery (C M) (Old Ordinance)—Robert Alexander Batchan Ruthwell, Dumfriesshire Leonard Cotterill Weybridge Surrey Alexander Brown Cruickshank Aberdeen, John Halley Aberdeen Donald Mackenzie Fairburn Muir of Ord Ross-shire Richard Norris Petrie Alford, Aberdeenshire Alex Charles Profeit, Dinnet, Aberdeenshire and Joseph Sebastian de Silva Moratuwa, Ceylon.

Degrees of Bachelor of Medicine (M B) and Bachelor of Surgery (Ch B) (New Ordinance)—Alex Henderson Cran, M A. Nigg Ross shire, James Matthews Duncan M A, Aberdeen Cecil Vivian Moore Etienne Le Fanu Cassel, Germany ‡George Alexander Finlayson M.A. Aberdeen John Charles Galloway M A., Oyne Aberdeenshire Arthur Norman Haig M.A. Ahmednagar Bombay India Charles Hunter M A. Rothie-Norman Aberdeenshire Francis Alex Innes M A., Skene Aberdeenshire John Wm Lindsay M A Peterculter Aberdeenshire James Henderson Mackay M.A Aberdeen John McPherson Aberdeen ‡George Alexander Mavor M A Aberdeen Alex Vennie Mitchell M.A. Old Rayne Insch, Aberdeenshire Charles Murray M A. Aberdeen Alex Bruce Simpson Alford Aberdeenshire James Alex. Stephen M A. St. Andrews—Lhanbryd, Elgin ‡Lessel Philip Stephen, M.A., Inverurie William Edward Taylor Aberdeen, James Alex. Tolmie M.A Glenglassaugh Portsoy Banffshire, and John Horne Wilson, Aberdeen

† Graduated with honourable distinction.

‡ Passed Final Examination with credit

Diploma in Public Health—§Alexander Keith Campbell M.B (Edin.), Montrose Wm Ironside Moir, M B (Aberd.), Aberdeen and Wm Henry Neilson M B (Aberd), Major Indian Medical Service

§ With credit.

Degree of Bachelor of Science (B Sc.)—David M Gall, Carnoustie (with special distinction in Geology) Charles D Rice M.A., Aberdeen (with special distinction in Chemistry) and George I T Stewart, M B Ch B, Banchory, Aberdeen (with honours, under old regulations)

HOSPITAL SATURDAY FUND—The twenty-fifth annual report published at the office of the Hospital Saturday Fund, 54, Gray s Inn road, W C, shows that the total income during 1898 was £19 148 as against £20,138 in 1897 The total sum awarded was £17 029 to 173 institutions, as against £17,627 to 169 institutions in 1897 The two highest awards to individual institutions were £879 to the London Hospital and £408 to the Middlesex Hospital The four highest collections received from the employés of individual establishments were £595 from the Royal Arsenal Woolwich, £385 from the General Post Office and branches £215 from the South Metropolitan Gas Company, and £174 from the Army and Navy Co-operative Society, Limited Mr R B D Acland, chairman of the Fund, has resigned that position and has been elected a vice president In his annual address he states that although the street collections were abandoned in 1898 yet the sum distributed was almost, if not quite equal to the largest sum distributed prior to 1897 The new chairman is Mr E M Bonus Hospital Saturday this year will be Oct 14th

LITERARY INTELLIGENCE—Mr J Y W MacAlister, the librarian of the Royal Medical and Chirurgical Society, is engaged upon a collective biography of the principal medical men of the nineteenth century There is little that is new to be said of those belonging to the first half of the century, but Mr MacAlister s close acquaintance with the profession at the end of the century should make the work authoritative as well as interesting Messrs Macmillan are the publishers

THE SOCIETY OF CHEMICAL INDUSTRY—Dr Thudichum read a paper before this society on Monday last, entitled, "The Industrial Technical Treatment of Sherry and of British Colonial Wines," which was stated to be a reply to our Commission on the "Production, Composition, and Character of Sherry" We await with interest the publication of Dr Thudicum's paper

THE NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY—The annual dinner of this society took place in the Venetian Room of the Midland Grand Hotel on Thursday, April 6th, and was a thoroughly successful function Mr Frank Godfrey, the President, took the chair, and was supported by Dr Glover, Dr Rose Bradford, F R S, Mr C B Lockwood, and Mr H W Allingham among others The toast of the evening, "The North London Medical and Chirurgical Society," was responded to by Mr Lockwood who in a speech of considerable vigour desired to infuse into the society "a healthy spirit of discontent with itself" He did not say that the society was doing badly but he said very clearly that he thought it should do better, and the same sentiment peeped out in the words of several other speakers Dr Glover proposed "The Sister Societies," which toast was responded to by Dr Rose Bradford, and Dr R W Burnet proposed "The Guests," for whom Surgeon General Don made suitable reply Dr G de B Watson and Dr W A Malcolm were much applauded for the songs with which the speeches were interspersed, as was Mr P Tracy Harris for a flute solo

PRESENTATIONS TO MEDICAL MEN—At the usual fortnightly meeting on March 29th of the Loyal St George Lodge, No 3840, I O O F, Manchester Unity, Mr. F Turtle, M D St And, M R C S Eng., on his retiring from the post of medical officer after 32 years' service, was the recipient of an address on vellum with a gold frame and an ebony walking stick with silver band on which is engraved, "Presented to Dr F Turtle by the 'St George' Lodge, No 3840, M U I O O F, March 29th, 1899"—On March 31st Mr Robert Marshall, L M Dub L S A., of Douglas, Isle of Man, was presented in the Guild Parlour at Rosemount by members of his ambulance classes with a token in recognition of the care with which he had instructed the classes as lecturer—On March 25th in the theatre of the Belfast Royal Hospital an address and valuable collection of instruments were presented to Dr Alexander Montgomery, the senior house surgeon, on the occasion of his resignation. The presentation was given by the students, not only by those who were resident with Dr Montgomery and the members of his clinical class but also by all the students attending the hospital—On March 25th Mr R H Edmondson, the manager director of the Garswood Hall Colliery Company, Ashton, distributed certificates to the successful candidates in the recent examination held under the auspices of the St John Ambulance Association and afterwards on behalf of the local class presented Mr W. Latham, L R C P Irel, M R C S Edin., the instructor, with ten volumes of "Chambers s Encyclopædia"

Parliamentary Intelligence.

HOUSE OF COMMONS

MONDAY APRIL 10TH

Lead Poisoning

MR. M KENNA asked the Home Secretary whether his attention had been called to the conclusions arrived at by Professor Thorpe and Professor Oliver in their report on lead compounds in pottery, and whether in view of those conclusions the Factory and Workshop Bill which he had stated his intention to introduce this Session would contain provisions for prohibiting the use of lead for glazing earthenware in those particular kinds of ware in which it had been proved to be unnecessary; for prescribing the use of lead in the form of a fritted double silicate; for prohibiting the use of raw lead and for prohibiting the employment of young persons and women as dippers, dippers assistants ware cleaners after dippers and glost placers in factories where lead-glaze was used.—Mr JESSE COLLINGS replying to the question said The Secretary of State is fully cognisant of the conclusions embodied in the report referred to which was made to him and presented by him to Parliament. The Bill to amend the law relating to factories and workshops which he has prepared will propose to give power to the Secretary of State to deal under certain conditions with all the points mentioned by the hon Member

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS

MONDAY (17th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) St. George's (2 P.M.), Ophthalmic 1 15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.) Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.) London Throat (2 P.M.).

TUESDAY (18th).—London (2 P.M.), St. Bartholomew's (1 30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.) London Throat (2 P.M and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (19th).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.) Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) Cancer (2 P.M.).

THURSDAY (20th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.)

FRIDAY (21st).—London (2 P.M.), St Bartholomew's (1.30 P.M.), St Thomas's (3.30 P.M.) Guy's (1.30 P.M.), Middlesex (1 30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.) St. Mary's (2 P.M. Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2. 30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (22nd).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), University College (9 15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1 30 P.M.) and the Central London Ophthalmic Hospitals operations are performed daily

SOCIETIES

TUESDAY (18th).—PATHOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—Mr T F Chevasse: Note on a Case of Gastrectomy with specimen.—Dr B Hunt: Two Cases of Splenic Anæmia with Internal Hæmorrhages in Infants.—Dr J H. Drysdale: Three Cases of Sprue.—Dr S Wilson: Casts of Hearts with Dilated Right Ventricles.—Dr Russell and Mr Buzzard Paramœcium Cysts on the Liver —Dr W Hadley: Peculiar Lardaceous Liver —Dr H. M Fletcher Atrophy of Parietal Bones.

WEDNESDAY (19th).—ROYAL MICROSCOPICAL SOCIETY (20 Hanover-square, W.).—8 P.M. Paper —Prof L. S. Beale: The Bioplasm of Man and the Higher Animals and its Influence in Tissue Formation, Action, and Metabolism.

THURSDAY (20th).—HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne-street, Edgware-road) —8.30 P.M. Clinical Evening

FRIDAY (21st).—SOCIETY OF ANÆSTHETISTS (20, Hanover square, W.).—Papers by Dr G H. Savage and Dr H. G Turney

EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish square, W.) —8.30 P.M. Paper:—Dr F R. Blaxall: The Relations of Bacteriology to Epidemiology (The date April 14th was in advertently printed on the Sessional Card.)

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER'S NOTICES

TO SUBSCRIBERS

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W C, are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c, should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect

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THE EARNINGS OF MEDICAL MEN

THE large fortune left by Sir William Jenner has led to much writing in the lay press, but owing to imperfect information as to the source of some of Sir William Jenner's wealth much excellent moralising has been made upon unsound deductions. Sir William Jenner was for many years at the top of the medical profession, having risen there by his genius and having been maintained there by scientific acclamation every whit as much as by popular favour During these years he undoubtedly made a very large income but not an income that would have enabled him to save such a sum as £375 000 and as a matter of fact a certain portion of his fortune was derived from trade and bequeathed to him by a brother But undoubtedly Sir William Jenner earned a great sum of money by the practice of his profession and the fact may legitimately act as a stimulus to young medical men to observe keenly and work hard.

The question Which occupation pays best? is one that has been discussed more than once and no one has ever suggested that the correct answer is the practice of medicine. The usual opinion, we believe gives the lawyer the first place and the stockbroker the second, but we incline to the belief that the wholesale supply of beer is the most lucrative following in modern Great Britain That a few medical men have made large fortunes is well known. For instance Sir Andrew Clark left £203 970 Sir Oscar Clayton left £146,746, Dr Rhodes Armitage left £217 420 Dr L. T Cumberbatch left £107 000 Sir Richard Quain left £116,820, Mr Henry Horsfall left £105,780 Dr G D Longstaff left £107 000, Dr Henry Danson left £119,290 and Dr J H. Paul left £100,052. But all these fortunes, several of which were certainly inherited and not made by professional practice are thrown into the shade by the estate of Sir William Gull, whose personalty was valued at £344 023. Sir William Gull, like Sir William Jenner made an enormous professional income, though fortunate investments perhaps played the part in swelling the total of his fortune that family bequests played in the case of Sir William Jenner The above names have been taken from lists compiled by the *Daily Telegraph* and the *Westminster Gazette* and cover a period extending over the last ten years. On the strength of them the medical profession cannot be said to abound in pecuniary prizes. Only 11 persons, whether shining in the front rank of the medical profession or engaged in one of its notoriously lucrative branches or blessed by accident with pecuniary advantages, have died during ten years in possession of more than £100,000, while a first-class brewer's fortune would be expected to amount to more than the aggregate total of the 11 medical fortunes or the brewer would be accounted a comparative failure. We are not setting up a wail that medical men do not make more money but the fortunes of Sir William Jenner or Sir William Gull ought not to lead the public to mistake the facts as to the average earnings of the medical profession. The profession in Great Britain numbers some 28 000 persons and although now and again one man dies rich the vast

ROBIN V J R., L.R.C.P Lond. M.R.C.S., has been appointed Medical and Health Officer at Port Douglas, Queensland.

RUST, MONTAGUE, L.R.C.P., L.R.C.S. Edin. has been appointed Assistant House Surgeon to the Glasgow Eye Infirmary.

SMITH W. B., L.R.C.P., F.R.C.S. Edin. has been appointed Medical Superintendent for the Metropolitan Lunatic Asylum, Kew Melbourne, Victoria, Australia, vice J. V. McCreery.

TAIT J. L.R.C.P., L.R.C.S. Edin. L.F.P.S. Glasg. has been appointed Medical Officer for the Sharnbrook Sanitary District of the Bedford Union.

VOORTMAN, JOHN BERNARD L.R.C.P. & S. Edin., L.F.P.S. Glasg., has been appointed Government District Surgeon for the Town and District of Fauresmith, Orange Free State, South Africa, vice A. B. W. Ramsbottom, resigned.

WILKIE, D. W. B., M.B. Melb., M.R.C.S. has been appointed Surgeon to the Hospital at Burketown Gulf of Carpentaria, Queensland.

WILLMOT, ROBERT, F.R.C.S. Edin. M.R.C.S., has been appointed Chairman of the Official Visitors of the Hospital for Insane at New Norfolk, Tasmania.

WILLOUGHBY, W. G., M.D. Lond. (Med and State Med.), D.P.H. Camb., M.R.C.S., L.R.C.P. has been re-appointed Medical Officer of Health to the Borough of Eastbourne.

WOOD M. A., L.R.C.P. Lond. F.R.C.S. Eng. has been re-appointed Medical Officer of Health by the Ledbury Urban District Council.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

BATH EASTERN DISPENSARY.—Resident Medical Practitioner. Salary £100 a year with furnished apartments, coals, gas, and attendance.

BETHNAL-GREEN BOARD OF GUARDIANS.—Second Assistant Medical Officer at the Workhouse and Infirmary at Waterloo-road, Victoria park, London, for six months. Salary at the rate of £80 per annum (payable monthly) with rations, furnished apartments, and washing, and £3 per annum in lieu of beer. Applications to the Clerk to the Board, Bishop's road, Victoria park, N.E.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN, Birmingham.—Resident Medical Officer, and a Resident Surgical Officer. Salary of each officer £80 per annum, with board, washing and attendance at the Hospital.

BIRMINGHAM CITY ASYLUM.—Resident Clinical Assistant for three months. Board and lodging provided.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House Surgeon. Salary to commence at £60 per annum, with board, washing, lodging, &c. Apply to the Secretary, 15, Richmond terrace, Blackburn.

BRISTOL ROYAL HOSPITAL FOR SICK WOMEN AND CHILDREN.—House Surgeon. Salary £100 per annum with rooms and attendance (not board).

CARLISLE DISPENSARY.—House Surgeon. Salary £130 per annum and apartments (not board).

COUNTY ASYLUM, Rainhill near Liverpool.—Assistant Medical Officer, unmarried. Salary commences at £100 per annum, with prospect of increase to £250, with furnished apartments, board, attendance, and washing.

DARLINGTON HOSPITAL AND DISPENSARY.—House Surgeon, unmarried. Salary £140 per annum, with rooms in the institution, but applicant to board himself.

DRIFFIELD UNION.—Medical Officer for Weaverthorpe District of the Union. Salary £21 per annum, with certain extra fees.—Apply to the Clerk to the Guardians, Driffield.

FISHERTON ASYLUM.—Assistant Medical Officer. Salary to commence at £100 per annum with board, lodging and washing.—Apply to Dr. Finch, The Asylum, Salisbury.

GENERAL HOSPITAL, Nottingham.—Assistant House Physician for twelve months. Salary £50 with board, lodging and washing in the hospital.

HOSPITAL FOR WOMEN, Soho-square London.—House Physician for six months. Salary £30 for that period.

LEWES DISPENSARY AND INFIRMARY AND VICTORIA HOSPITAL, Lewes.—Resident Medical Officer. Salary £90 per annum, furnished apartments, board, coals, gas, and attendance.

LIVERPOOL DISPENSARIES, 34 Moorfields, Liverpool.—Assistant Surgeon, unmarried. Salary £80 for the first year, and £90 afterwards, with board and residence.

LONDON HOSPITAL MEDICAL COLLEGE.—Assistant to the Bacteriologist and Lecturer on Bacteriology.

LONDON HOSPITAL, Whitechapel road, E.—Obstetric Registrar.

LONDON TEMPERANCE HOSPITAL, Hampstead road, N.W.—Medical Registrar. Salary 50 guineas per annum.

MANCHESTER, CHORLTON UPON MEDLOCK DISPENSARY.—Resident House Surgeon. Salary £120 a year with furnished rooms and attendance.

NORTH WEST LONDON HOSPITAL, Kentish town road.—Resident Medical Officer and Assistant Resident Medical Officer for six months. Salary for the senior post at the rate of £50 per annum.

ROTHERHAM HOSPITAL AND DISPENSARY.—House Surgeon for three years. Salary 100 guineas, with rooms, commons, and washing. Also Assistant House Surgeon. Salary £30 per annum, with rooms and washing.

ROYAL BERKS HOSPITAL, Reading.—Vacancy in the Medical Staff.

ROYAL COLLEGE OF SURGEONS OF ENGLAND London.—Examiners.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City road, London.—House Physician for six months. Salary at the rate of £40 per annum, with board, lodging and washing.

SHEFFIELD ROYAL INFIRMARY.—Junior Assistant House Surgeon. Salary £50 per annum with board, lodging and washing.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY 189, High street, Stoke Newington, N.—Junior Resident Medical Officer. Salary for the first three months at the rate of £50 per annum and afterwards at the rate of £75 per annum, with board and residence in each case.

STOCKPORT INFIRMARY.—Assistant House and Visiting Surgeon. Salary £70 per annum, with board, washing, and residence. Also Junior Assistant House Surgeon. Salary £2 per mensem, with board, washing and residence.

SUSSEX COUNTY HOSPITAL, Brighton.—Surgeon and an Assistant Surgeon.

SWANSEA GENERAL AND EYE HOSPITAL.—House Surgeon for one year. Salary £50 per annum, with board, apartments, washing, and attendance.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea, S.W., and the VICTORIA CONVALESCENT HOME, Broadstairs.—House Physician for six months. Honorarium at the rate of £50 per annum, with board and lodging in the Hospital.

WREXHAM INFIRMARY.—House Surgeon. Salary £80, with board, washing and furnished apartments.

Births, Marriages, and Deaths.

BIRTHS

HILDIGE.—On April 10th at Brookfield, Pinner, the wife of H. J. Hildige L.R.C.P. and L.R.C.S. Irel., of a son.

HODGSON.—On April 11th, at Blisworth Northamptonshire, the wife of Harold Hodgson, M.B., B.S. Lond. of a son.

HOSSACK.—At The Pentlands Woodbridge-road Ipswich, the wife of James F. C. Hossack, F.R.C.S. Edin., of a son.

MARTIN.—On April 10th, at Gloucester-terrace, Hyde-park, W., the wife of Henry C. Martin, M.D. of a daughter.

NEWBOLT.—On April 12th at 42, Catharine-street, Liverpool, the wife of George Palmerston Newbolt M.B.Durh. F.R.C.S., of a daughter.

SKINNER.—On April 7th, at Bank House, Rye the wife of Ernest W. Skinner, M.D., of a daughter.

MARRIAGES

BURNS—BAINES.—On April 8th, at Christ Church, Emerydown, Hants, Theodore G. A. Burns, M.A. Oxon. M.R.C.S. Eng., Wimpole-street, W. to Rosamund, third daughter of E. Talbot Baines, of Emerydown.

CARTER—RICHARDSON.—On April 5th at the Magheragall Parish Church Lisburn, Co. Antrim, by the Rev. J. P. Haud M.A., vicar of Chapel Allerton, Leeds, assisted by the Rev. R. Walker LL.D., rector of Magheragall Eustace George Carter M.R.C.S. Eng., of Chapel Allerton, Leeds, youngest son of the late Joseph Barton Carter M.R.C.S. Eng. to Josephine Mary (Effie), youngest daughter of Joseph Richardson, Esq. Springfield, Lisburn, Co. Antrim.

CHAMBERS—WOOD.—On April 8th, at the Church of St. Mary Abbots, Kensington W., William Francis Chambers, L.R.C.P., M.R.C.S., Cheriton gardens Folkestone, to Edith, second daughter of the late Professor John Wood F.R.S., F.R.C.S., of King's College Hospital.

CROSS—BERGUER.—On April 5th, at Holy Trinity Church, New Barnet, Ernest William Cross M.R.C.S. Eng., L.R.C.P. Lond., of Leytonstone Essex, to Constance Mary daughter of the late Rev. H. J. Berguer, of St. Philip's, Islington.

MASON—LANGHORNE.—On April 6th, at St. Peter's Church, Woolley Wakefield, George A. Mason, M.A., M.B., B.C. Cantab., of 45, George-street Portman-square, W. to Alice Wood, eldest daughter of R. Ernest Langhorne, solicitor Woolley Moor House Wakefield.

MENZIES—GREEN.—On April 6th, at the Parish Church, Watford, William Francis Menzies, M.D. B.Sc., M.R.C.P., Superintendent of the Staffordshire County Asylum Cheddleton, to Jessie (Daisy), second daughter of George Green, Watford Field House, Watford.

MORICE—SEDDON.—On Nov. 29th, 1898, at Wellington, New Zealand Charles G. F. Morice, F.R.C.S. Edin., of Greymouth Hospital, to Louisa Jane Spottswood third daughter of the Right Hon. R. J. Seddon, P.C. LL.D. Premier of New Zealand.

TIDSWELL—CALLEY.—On April 11th at St. Mark's Church, Surbiton, Surrey, by the Rev. J. H. Calley, brother of the bride, and the Ven. Archdeacon Burney, Herbert Henry Tidswell, M.R.C.S. and L.R.C.P. Lond. of Camborne Cornwall, to Agnes Elizabeth Calley, youngest daughter of the late Rev. Charles Calley, rector of Blunsdon St. Andrew, Wilts.

TRECHMANN—SWALES.—On April 11th, at St. Paul's Church, York, by the Rev. Reginald Echalaz, vicar of Willoughton, Lincs., assisted by the Rev. J. Stephens, vicar of the parish, Maximilian Lincoln Trechmann, M.B., C.M. Edin., F.R.C.S. Eng. of 131, St. George's road, S.W. seventh son of the late Otto Trechmann, of Stockton-on-Tees to Mary only daughter of William Swales, Holgate-hill, York.

YOUNG—SEACOME.—On April 11th, at Hornsey Parish Church, by the Rev. R. J. Purchase M.A. Chas. Albert Young, B.A. Cantab., M.R.C.S., L.R.C.P. of Hunmanby, Yorks., to Maria, younger daughter of the late Thos. Harrison Seacome, C.E., and Mrs. Seacome, Wem, Shropshire.

DEATHS

BARNES.—On Wednesday April 5th, at Perth, West Australia, John Shepperson Barnes, B.A. M.D. eldest son of John M. Barnes, of Morningthorpe, Norfolk, aged 31. By cable.

GIBBINGS.—On April 9th, at his residence, 93, Richmond road, Dalston, London, Alfred Thomas Gibbings, M.D. Lond. aged 50 years.

RENTON.—On March 31st, at Brighton, suddenly William Renton, L.R.C.S. L.R.C.P. L.M. Edin., L.S.A. Lond., late of Knaresborough aged 52 years. Interred in the family vault at Knaresborough Parish Church April 4th.

ROWLANDS.—On April 10th, at King street, Carmarthen, James Rowlands, F.R.C.S., in his 85th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

changes following our treatment would no be greatly improved It certainly appears more simple and cleanly to introduce a medicine into the system without the intervention of the alimentary tract, and with many drugs and sufficient care it is free from risk, and the physiological effect is by comparison certain regular and rapid. It is unhappily a fac that much faith is sometimes required to detect the action of the most complicated prescriptions, an i it is reassuring when by means of such medicines as pilocarpine, atropine strychnine, or morphine given hypodermically we can be certain of obtaining our en is and with all possible despatch. It is doubtless a drawback that nervous patients may object to the needle in the first instance until confidence has been acquired by a repetition of the little operation. The u e of the hypodermic needle is so simple that it is often entrusted to the nurse. Simple as it is, however quite a variety of local disturbances are commonly met with It is not necessary to do more than to mention the importance of a sterile needle and syringe and an unirritating solution or the consequences of neglecting surgical cleanliness. In selecting a situation for injection care is of course taken to avoid a vein. This is not always so easy especially when much fat is present and the vessels are not seen or where the skin cannot be lifted freely from the subcutaneous tissue. Thus it happens that a vein may be punctured followed by (1) external bleeding, or (2) the vessel may bleed into subcutaneous tissue in which case hæmatoma results and the solution mixing with the blood is more slowly absorbed, the physiological effect is therefore longer in duration though slower in onset and (3) the solution is occasionally injected into the lumen of the vein the effect of this will naturally depend upon the drug used In the case of morphine and cocaine it appears at least with some persons to be one of general stimulation the pulse is much accelerated the carotids throb and patients describe the sense of fulness in the head similar apparently to that which follows inhalation of nitrite of amyl and sufficiently alarming to most patients. I have not observed any exaggeration of the narcotic effect of morphine when his accident has occurred. In view of the possibility of the needle accidentally entering a vein which in my experience appears to happen once in many hundreds of injections in the usual method of procedure—it is important to have no air bubbles in the syringe. If the needle is entered at right angles to the course of the vessels the ri k of injection into a vein is minimised although the likelihood of pricking a vein is increased. When the needle enters with difficulty and meets considerable resistance a vein has probably been encountered, but experience alone can decide how much to allow for thick skin or a needle with a defective edge The extent to which the little operation is painful—a point usually considered a trifling matter by the surgeon—depends upon the diameter and sharpness of the needle the site of injection, and the nerve-supply and density of the tissues and whether the needle is entered more or less at right angles to the surface or obliquely Again, the needle is sometimes made to transfix the skin and the solution injected into the deep layers of the dermis after traversing the cellular tissue this is a clumsiness for which the patient has to suffer and it is usually followed by an urticarial wheal and a good deal of local irritation. Tenderness at the point of injection lasting several days or the formation of an abscess indicates sep'c needle or syringe. Lastly cocaine given hypodermically for severe neuritis will often relieve equally well wherever injected, indicating that its action is general as well as local in some cases. I am, Sirs, yours faithfully

Eastbourne, April 5th, 1899 FRANK ELVY

A QUESTION ABOUT COCAINE.

To the Editors of THE LANCET

SIRS,—I have noticed lately several statements to the effect that cocaine loses its anæsthetic properties on boiling May I ask what authority there is for this? It is quite contrary to my own small experience I am Sirs, yours faithfully

Wonersh, Guildford, April 5th, 1899 C. SCOTT WATSON

"A COLOTOMY CLAMP"

To the Editors of THE LANCET

SIRS,—In THE LANCET of April 8th I gave the name of Mr W Phayre Ryall as the author of certain modifications in a colotomy clamp. I should have written, Mr E. Canny Ryall.

I am, Sirs, yours faithfully

Manchester-square, W F A. PURCELL, M.D R.U.I.

EXAMINATION OF MALARIAL ORGANISMS

IN the *Maryland Medical Journal* of March 18 h Dr C. E. Simon of Baltimore, after mentioning some objections to the use of methylene-blue and eosin for the staining of blood containing malarial organisms gives the preference to the following method recently proposed by Dr Futcher The air-dried blood films are fixed for one minute in a 1 per cent. alcoholic solution of formalin, and after draining off the excess are stained in a solution composed of (a) one part of a saturated solution of thionin in 50 per cent. alcohol and (b) five parts of a 2 per cent. aqueous solution o carbolic acid. After staining for 30 seconds the specimens are washed in water, dried between filter paper and mounted in Canada balsam or oil of cedar The red corpuscles are stained a light lavender while the nuclei of the leucocytes and the malarial organisms are coloured a purplish red. Preparations which are very clear and also free from precipitated pigment may be obtained by a method similar to that of Ehrlich for the demonstration of glycogen. The air-dried blood films are fixed for a few minutes in absolute alcohol and after drying are exposed to the vapour of iodine for from 10 to 15 minute. Dr Simon places solid iodine in a small glass dish provided with a well fitting cover and the specimens blood side down, upon little tripods of glass so as not to come in direct contact with the iodine When the specimens present a well marked yellow colour they are mounted in a drop of syrup of levulose. Unfortunately the colour of the red corpuscles fades after from 12 to 24 hours, so that the preparations cannot be preserved.

W G G.—It is somewhat difficult to give an exact answer to our correspondent's question. In Burdett's Hospitals and Charities for 1898 are given statistics of the expenditure of two fever hospitals—namely the London Fever Hospital and the Cork street Hospital Dublin. At the London Fever Hospital in 1895 the daily average number of beds occupied was 100, and the average cost per bed occupied was £105 10. At Dublin the average number of beds occupied was 193, and the average cost per bed was £36 10s At the London Hospital the figures for preceding years were as follows —

Year	Cost.	Average number of beds occupied
1896 ..	£105 10s	100
1895	£119 0s	73
1894	£161 5s ..	50
1893	£82 0s	120

Thus the more beds there are occupied the less the average cost per bed. The cost per bed is arrived at by dividing the daily number of beds occupied into the total ordinary expenditure. We should not say that £30 per bed per annum was high, and probably the average expenditure on a hospital of 30 beds would not be more than on one of 24

Query.—There is we believe no book dealing specially with the construction and cost of infectious hospitals The matter is dealt with generally in Burdett's Hospitals and Asylums of the World" vol. iv where a number of plans and descriptions are given of infectious hospitals. Dr Mouat in Saxon Snell's Hospital Construction and Management" also deals with the matter generally

Practitioner will see at once that such notices of removal may become the source of grave abuse The advertisement he suggests has nothing objectionable about it, but it should not be inserted more than two or three times. If it were repeated often it would rightly be regarded as a disguised advertisement.

B W B.—1. No yet, but several we believe are in course of preparation. 2. We know of no institute especially designed to meet such cases but the patient might we think, obtain hospitality upon the terms mentioned if his wants were advertised.

Bronchocele.—The question cannot be definitely answered as the nature of the goitre-producing substance is not specifically known.

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m by Steward's Instruments)

THE LANCET Office April 13 h, 1899.

Date	Barometer reduced to Sea Level and 32° F	Direction of Wind	Rainfall	Solar Radia in Vacuo	Maximum Temp Shade	Min. Temp	Wet Bulb	Dry Bulb	Remarks at 8.30 A.M
April 7	29 15	S W	0·07	75	57	47	47	49	Stormy
" 8	29·57	N W	0·20	95	57	43	41	45	Cloudy
" 9	29·29	W	0 12	101	57	37	43	47	Cloudy
" 10	29·57	WNW	0·40	102	62	45	52	54	Overcast
" 11	29·70	N	0·14	94	59	42	42	43	Overcast
" 12	29·80	N W	0·01	90	59	36	39	41	Cloudy
" 13	29 17	S W	0·02	82	52	41	41	43	Raining

During the week marked copies of the following newspapers have been received *Cheshire County News Bigan Observer East and South Devon Advertiser Barrow Herald, Northampton Mercury Manchester Guardian, Scotsman, Builder Edinburgh Evening Dispatch, North British Daily Mail, Architect, Citizen Eastern Morning News, Sun Times of India, Pioneer Mail, Newcastle Daily Chronicle, Bradford Observer Bath Herald, Leicester Daily Post, Dundee Advertiser Longton Times Liverpool Daily Post, Daily Chronicle Leeds Mercury Sheffield Daily Telegraph, Bedford Times Daily Mail, Bristol Mercury Halifax Guardian, Staffordshire Advertiser Yorkshire Post, Brighton Gazette, Wiltshire Chronicle, Bury Guardian, Epworth Weekly Herald, Preston Herald, Kentish Chronicle Dover Express, Ilfracombe Gazette, Faversham News Warwick Times Rugby Times, Belford News Berks Advertiser Horncastle News Reading Mercury Hertfordshire Mercury City Press, Sanitary Record, Local Government Journal, Echo, Local Government Chronicle, Bournemouth Visitors Directory Mining Journal, Surrey Advertiser Reading Observer Montgomery County Times South Durham Mercury Weekly Free Press and Aberdeen Herald, Berkshire Chronicle, Stockport Chronicle Evesham Journal Western Daily Post, &c. &c.*

majority die otherwise During their life they discharge onerous duties for very inadequate payment and at their death the provision they have been able to make for their wives and children is too frequently so scanty as to amount to nothing In the teeth of these well known facts why is it that the medical man's bill is so generally considered exorbitant by the public? That it is so considered we think, is undeniable Doctors bills are the proverbial dread of paterfamilias at Christmas-time *Punch* makes jokes about this and the theme has led to funny lines in farces and comic writing in fiction And common conversation, as well as the amount of bad debts made by the general practitioner, confirm our belief that the medical man is apt to be regarded as one whose charges as a creditor should be resisted Why is this? It cannot be because of any widespread belief that medical men as a body make large fortunes—that is demonstrated by the rarity with which even under the most favourable auspices, the six figures are reached We believe it is because the public has been thoroughly spoilt in the matter of paying the medical man. All sorts of persons get their treatment for nothing, or next to nothing owing to the kindness of medical men Lay associations have organised charitable treatment of the poor, the charity to be supplied by the medical man who is to treat the poor as best he can on the wages of an artizan Many hospitals have opened their gates with scarcely any discrimination to classes well able to pay private practitioners for adequate attendance These are the factors that by supplying medical treatment too cheaply and easily have made the demand of the general practitioner for discharge of his modest account seem exorbitant.

THE USE OF MIDWIFERY FORCEPS"

To the Editors of THE LANCET

SIRS,—I quite agree with your correspondent Dr Simpson in THE LANCET of April 8th, 1899 that it is unseemly for one practitioner to accuse his brethren of unjustifiable practice because the use of the forceps and their advantage to both patient and medical attendant are better understood now than they were 50 years ago. I am an advocate for the use of the forceps in suitable cases without too much delay when the labour has reached the second stage I have never had cause to regret their use and the cases of serious rupture of the perineum have been very rare I cannot however, claim to use them as frequently as Dr Simpson. My average for the last five years in a practice of about 60 confinements a year I find to work out at a little over 13 per cent

I am Sirs, yours faithfully

Brentwood April 10th 1899 J R. WHITE.

THE REICHARDT FUND"

Dr. Goodhart and Dr Savage acknowledge the following further subscriptions:—

	£	s	d.		£	s	d
Anonymous	75	0	0	Mr William Duff	2	2	0
Mr J F Maingay	2	2	0	Mr Alec B Johnson	2	2	0
Mr Norbury Tutt	2	2	0	Mr Alec Johnson jun	2	2	0
Mr H C Vardon	5	5	0	Mr F Mead	2	2	0
Dr James	1	1	0	Mr C Braby	0	5	0
Mr Patrick C Kerr	2	2	0	Mrs. Phillips	2	0	0
Mr F R. Walker	5	0	0	Captain Cuthbert	1	1	0
Dr Hearden	5	0	0	Lady Glyn ..	3	3	0
Mr W Lattge	5	5	0				

FAGS AND FAGGING

MESSRS GEORGE NEWNES have just published a new monthly magazire for boys and old boys" with the title of *The Captain* It is full of good things for boys of all ages and an article on Fags and Fagging which is almost a plea for a return to the 'old days, is suggestive Says the writer "Those best bear rule who have earliest learned to serve and the unpaid servitude of fagging still affords one of the most valuable lessons the public school can teach" To it perhaps we owe, the writer suggests, a Chatham, a Wellington a Palmerston and a Peel, as well as that Napoleon of public schools—Arnold of Rugby

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR H KINGSLEY HUNTER L.S A.

To the Editors of THE LANCET

SIRS —The undermentioned donations have been received the total now amounting to £20 1s —

	£	s	d		£	s	d.
Dr R. R Law	0	5	0	Mr F H Oliver	0	5	0
Dr John Brown	0	10	0	Mr A. Greenwood	0	10	6
The Brussels Medical Graduates Association	2	2	0	Mr Herbert C P Masser	0	10	6
Dr Louis J Fitzpatrick	1	1	0	Dr J W Noble	0	10	6
Dr Dhingra	0	5	0	Dr F de Havilland Hall	1	1	0

I am Sirs yours faithfully

RIVERS WILLSON Treasurer

42, Wellington square, Oxford April 12th 1899

WHAT CONSTITUTES A PUBLIC BODY OR INSTITUTION?

A MEDICAL man has submitted the following question to us —"The last sanitary authority I was in relation with when in charge of garrison women and children asked me to notify all infectious cases, both in and out of barracks and paid me half a crown for each case. The present one asks for only notification out of barracks and offers only one shilling in each instance. I do not consider that I am a medical officer of any public body and propose to claim the whole fee Am I right in doing so?'

Questions have arisen as to the precise meaning as to what constitutes a "public body or institution" under Section 4 of the Infectious Diseases (Notification) Act, 1889 but we never heard it contended that a medical practitioner in charge of garrison women and children was deemed a medical officer to such body or institution and we advise that the ordinary fee should be claimed and insisted on.

'THE THERAPEUTICS OF COMFREY"

To the Editors of THE LANCET

SIRS —I find in an old book printed in 1597 and called 'The Herbal or General Historie of Plants gathered by John Gerarde of London Master In Chirurgeris the following notes on the "Vertues" of Comfrey—Consolida Major

A. The rootes of Comfrey stamped and the juice drunke with wine, helpeth those that spit blonde and healeth all inward wounds and burstings

B The same brulsed and laide to in manner of a plaister doth heale all fresh and greene woundes and are so glutinative that it will sodder or glewe togither meate that is chopt in peeces seething in a pot and make it in one lump

C The rootes boiled and drunke doth cleanse the brest from flegme and cureth the greeves of the lungs especially if they confect with sugar in syrup it prevaileth much against ruptures and burstings.

D The shinie substance of the roote made in a posset of ale and given to drink against the pain in the back gotten by any violent motion as wrestling or overmuch use of women, doth in fower or five days perfectly cure the same although the involuntarie flowing of the seed in men is gotten thereby

E The rootes of comfrey in number fower, knot grasse and the leaves of Clarle, of each a handfull being stamped altogether, and strained and a quart of muscadell put thereto the yokes of three egges, and the powder of three nutmegs drunke first and last is a most excellent medicine against Gonorrhœa or running of the vaines and all pains and consumptions of the backe

F There is likewise a syrup made heereof to be used in this case, which staieth voiding of the blonde tempereth the heate of agues allaith the sharpness of flowing humours healeth up ulcers of the lungs and helpeth the cough the receit whereof is this: Take two ounces of the rootes of great comfrey, one ounce of Lyquorice, two handfuls of folefoot rootes and all one ounce and a half of Pine apple kernels twenty iujubes; two drams or a quater of an ounce of Mallowe seede one dram of the head of Poppies boile all in a sufficient quantitie of water till one pint remaine straine of, and adde to the liquor strained sixe ounces of very white sugar and as many of the best honie and make heeref a syrup that must be throughly boiled.

G The same syrup cureth ulcers of the Kidneys, though they have been of long continuance and stoppeth the blonde that commeth from thence

H. Moreover it staieth the overmuch flowing of the monethly sickness taken every day for certain daies togither

I It is highly commended for wounds or hurts of al the rest also of the intrailes and inward parts, and for burstings or ruptures.

K. The rootes stamped and applied unto them, taketh away the inflammation of the fundament and overmuch flowing of the hemorrhoides.

With regard to the 'Vertues" of the great celandine or swallow wort Gerarde gives the following —

A. The juice of the herbe is good to sharpen the sight, for it cleanseth and consumeth awale slimie things that cleave about the ball of the eie and hinder the sight and especially being boiled with hony in a brasen vessell as *Dioscorides* teacheth

B The roote cureth the yellow iaundice that commeth of the stopping of the gall, especially when there is no ague joyned, for it openeth and delivereth the gall and liver from stoppings.

C —The roote being chewed is reported to be good against the toothache.

D —The juice must be drawne foorth in the beginning of Sommer and dried in the Sunne saith *Dioscorides*

E.—The roote of Celandine boiled with Annise seede in white wine openeth the stoppings of the liver and cureth the iaundice very safely as hath often been prooved

F —The roote cut in small peeces is good to be given unto Haukes against sundry diseases whereunto they are subject, as wormes, craie and such like.

I am Sirs, yours faithfully

Newmarket April 4th 1899, JOHN H. MAUNE.

THE ADMINISTRATION OF DRUGS BY SUBCUTANEOUS INJECTION

To the Editors of THE LANCET

SIRS —The adoption of the hypodermic method of exhibiting medicines appears likely to increase in favour owing to certain advantages sufficiently apparent. The stomach is far from being chemically clean and it is not easy to follow with anything like accuracy the changes which drugs undergo when brought into contact with the gastric and other secretions. Even though it were possible to correctly estimate the degree of acidity for instance present at a given time our position in respect to the chemical

An Address

ON

MENTAL ABILITIES AND DISABILITIES OF CHILDREN.

Delivered before the Childhood Society at the Parkes Museum on Jan 31st, 1899,

BY FRANCIS WARNER, M D, F R C P LOND,
PHYSICIAN AND LECTURER ON THERAPEUTICS AT THE LONDON HOSPITAL.

LADIES AND GENTLEMEN—There is a valuable literature of school hygiene and we have many useful books dealing with the prevention of illness and the cultivation of health during the period of school life and in the schoolroom School hygiene in this aspect has been pursued by many workers as far as possible on the basis of the exact sciences, employing methods of inquiry, observation, and description as in other branches of physical science, facts seen are recorded, analysed, and summarised while methods of experimental research have corrected and added exactness to the knowledge first obtained. School hygiene has led to valuable results in the prevention of disease and the early detection of illness by tracing the connexion between school life and the prevention of epidemics Such means have done much to promote the *corpus sanum*, it is desirable that we should follow the same methods of natural science in studying the health and mental abilities and disabilities of children. A large field for inquiry and study is here presented as supplemental and co-relative to the psychological aspect of mental training and school life Among many other sections of this subject we might study mental aptitude and mental disabilities or causes of mental dulness in children, mental weariness and brain fatigue, mental confusion and abnormal concomitant conditions, defects of memory and means of removing them, reversion in mental states and childish faults, and mental breakdown at adolescence and its connexion with previous training A large number of other questions and many propositions bearing on the mental status of children might be mentioned All these subjects may be investigated on the same lines as those used in studying school hygiene in its concern with bodily health—that is, by direct observation of children and record of the facts seen.

Mental aptitude or the potentialities for mental training are indicated in a child in whom we observe spontaneity of action easily controlled through the senses and regulated by impressions received, spontaneity of movement, liveliness in facial expression, talkativeness with capacity to follow organised games and occupations are hopeful signs When these are accompanied by good imitative power in action and in speech, with retention of what has been acquired and more exact repetition after practice the indications of educable brain power are distinctly present The cultivation of each individual sign of such aptitude, first separately then collectively, may be advisable, this is specially the case when one item is deficient as, for example, where some form of spontaneity is not easily coördinated—it may be restless eye-movements or finger twitches which lead to incorrect observation and poor manipulative ability These points I have described in detail elsewhere [1]

The subject of mental fatigue has been investigated by many accurate observers on experimental lines at one period a great deal was said on "over pressure," sometimes I venture to think, without sufficient analysis of the many causes which may produce exhaustion Weariness may be due to many circumstances much might be said as to the effects of muscular exercise, ventilation diet conditions of the blood and of the circulation, &c in producing fatigue, but I wish here to keep as closely as possible to the consideration of brain conditions leading to fatigue and exhaustion The signs of brain fatigue are easily observable in the movement and balance of the parts of the body, specially as seen in the face the eyes, and in finger action. In brain fatigue the force expended in movements is small in amount and the total number of movements may be lessened, while action in the child is less easily and regularly controlled through the senses At the same time, a certain number of irregular movements, spontaneous or not stimulated by directions, may occur, suggesting that "the fatigued child is reduced to a more childish condition" of spontaneity than when his brain is fresh and healthy, thus the eyes may often move in the horizontal direction uncontrolled by sight or sound, or the fingers as he holds his pen, or when the hands are held out, or as he fidgets without doing his work Loss of force or nerve tone is indicated by the lessening of facial expression, fulness or bagginess under the eyes, to which may be added spontaneous knitting of the eyebrows or corrugation The hands when held out free in front are usually at an unequal level and droop in the fingers, while the head may drop to one side and the shoulders be unequally balanced In such a child all movement in response is slow and inaccurate as well as the speech and the signs of mental action

The chief means of preventing exhaustion lie in the early recognition of the signs of fatigue, which may appear first either in mental response or in motor signs It is quite possible for a trained pupil showing considerable signs of brain fatigue to continue good mental work, as during an examination, but there is peril in prolonged periods of brain fatigue without recreation I will not say that fatigue is always to be avoided, but the day's fatigue should be recruited by the night's rest

It must be remembered that "mental fatigue is used in physiology as a term intended to express the amount of brain (cortex) energy spent in mental processes It is the amount of physiological work done among the brain cells (psychosis) that we intend to express, not the number of movements or amount of movement employed in its expression by words or action. Still less is the physiological energy spent among the nerve cells to be estimated by the value we as educated persons put upon the usefulness of the outcome It may be doubted whether we can determine the quantity of mental action occurring in a given time or whether any unit for quantitative comparison exists, this cannot be represented by the value of the work done It is only the mental action which is expressed that we can estimate quantitatively—not the quantity of brain action, many thoughts may arise and be inhibited in the brain not expressed in some difficult processes of thinking this occurs to a large degree, especially in original work and in thinking out cause and effect or in seeking illustrative examples The time and order of succession and adhesion of mental acts has more to do with the character of mental processes than the quantity of brain-energy expended. Thoughts of real value, like actions, depend on their coördination by circumstances, not upon the degree of brain-wear expended. Estimation of the value of intellectual acts in the child and adult differs so greatly as to make comparison difficult They may, however, be more easily contrasted In the child the impressions retained are less exact, spontaneity is more abundant and may interfere with any established order of thoughts Such spontaneous thoughts as brain work may add to mental fatigue There exist but few established modes of thought to come into play leading to any conclusion Effective training lessens brain fatigue

From the point of view of mental hygiene attention and mental confusion may be contrasted, together with the means of cultivating the former and avoiding the latter In making observations for the purpose of determining the modes of brain action corresponding to a mental act of attention we must directly observe the motor expression in the child Spontaneous movement is equally characteristic of young animals and young children A dog going out for a walk with his master evinces his joy in spontaneity by running in the field and making ever wider circles or ellipses he may return to his master and then recommence his career till seeing a cow he barks at her but is again recalled by his master's voice At length he runs at the cow and teases her Spontaneous action is here the primary mode of energy displayed, it becomes controlled and coördinated partly by the master's voice, in part by the sight of the cow, these controlling forces act in different proportion This strongly resembles the movements of the root of a seedling bean in its circumnutation, wandering in ellipses, while under control or guidance of impressions received at or near its apex obstructions to its downward growth are avoided [2]—

[1] Study of Children and their School Training London Macmillan. No 3948

[2] C. Darwin: Movements of Plants pp 420 422, and 427

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an amœboid parasite A considerable array of observers including Bergonzini, Klein, Raum, Hauser, Shattock and Ballance, Goldmann Rossi, Touton, Mantegazza, Pelagatti, and others contended that the appearances described were the result of degeneration of one kind or another, or of something not parasitic The variety of explanation has been great and it is not going too far to say that the effect was that the current view has been that all work contending for the parasitic nature of the appearances was either wrong or wrongly interpreted When Ruffer brought forward his work at the annual meeting of the British Medical Association I stated that I was familiar with all the intracellular appearances and that his preparations were so beautiful that it was vain to continue the subject from the morphological standpoint as nothing more could be made of it, that the two opinions would continue to be held—namely, (1) that they were parasites, and (2) that they were merely degenerations Experimental work by those whose circumstances permitted them to pursue the subject could alone settle who was right

Within the past few years experimental work has been gradually determining, as it seems to me this question It is to investigators in Italy that we are indebted for its elucidation and it is mainly with the view of bringing the Italian work somewhat fully before the profession in Britain that this paper is written The honour and credit of the experimental work belongs, in the first place, to Professor Francesco Sanfelice, director of the Institute of Hygiene in the Royal University, Cagliari Before entering on an account of his work it is necessary to state that when I published my paper the dictum of pathologists was that the blastomycetes were not pathogenic and this authoritative dictum ruled men s minds as dicta of the kind usually do

Sanfelice s Discovery of a Pathogenic Blastomyces

Sanfelice s attention seems to have been directed to cancer by what we call chance He was engaged in investigating the morphological and biological characters of blastomycetes when he found that one of these was pathogenic and was interesting not from this fact alone but from the further fact of its morphological resemblances to the bodies which had been described as cancer coccidia He then, apparently looked more fully into the literature of pathogenic blastomycetes and from this it appears that Neumayer and Raum had both experimentally inoculated animals with pure cultures but without results of importance Busse had described a case diagnosed as sarcoma of the tibia in which numerous cells were found which Löffler cultivated and pronounced to be blastomycetes Experimental inoculation with these only proved that the parasite was capable of reproduction in the animal body Mafucci and Sirleo described a blastomyces obtained from a guinea pig with which they were able to inoculate other guinea pigs This seems to have been the position as regards pathogenic blastomycetes, when Sanfelice had begun the investigations to which special reference is to be made

The special organism with which Sanfelice experimented he has called the saccharomyces neoformans ' Inoculation of guinea pigs with it showed that wherever inoculation was performed the result was a general infection of the animal with the formation of tumours, consisting partly of masses of the parasite and partly of proliferation of the cells of the part. The infection spread by the lymph and blood channels and did not cause inflammation The animals usually died within a month and he noted that in the tissues the parasite had a somewhat different appearance to that which it had in cultures The appearances of this parasite in the tissues of guinea pigs had a great resemblance to the bodies found in human malignant growths by many observers Most of these authors believed these bodies to be coccidia and it was by Russell alone that the bodies were believed to be blastomycetes In a further paper he continues the account of experimental inoculation of other animals In mice inoculation led to a rapid infection with great multiplication of the parasite In white rats the process was slower the animals dying after from one and a half to two months and with more reaction on the part of the tissues In rabbits only two out of 12 inoculated died and in the fatal cases the parasites were fewer in number, but there was more proliferation of the tissue elements than in the other animals Out of 30 dogs inoculated only two developed a tumour at the point of inoculation and metastasis in internal organs One of these dogs was killed after four months, the other died after 10 months The pathological changes in the first dog consisted in the development of a nodular tumour in the mammary gland where the inoculation had been made, with enlargement of neighbouring lymph glands The changes were like those of sarcoma Very few parasites were found and no cultures could be obtained from any of the tissues In the second dog the growths were different but I have so far failed to find an account of the anatomical changes present in it In fowls the parasite presented a different appearance to the appearance in the other animals

The Morphological Characters presented by the Blastomycetes when Inoculated into Animals

In a paper dated September, 1897, on the Experimental Production of Russell s Fuchsin Bodies, Sanfelice says that until that time among the animals he had inoculated with saccharomyces neoformans it was only in dogs that the blastomyces appeared in the typical forms as described by Russell under the name of "fuchsin bodies' Russell described them as certain structures which he could almost always demonstrate in carcinomata They were almost spherical, 4–12 μ in diameter homogeneous, and without a trace of structure They lay almost always in groups of 3–20 elements, some of them were bounded by a thin rim of cell protoplasm, while the majority lay in a clear area in a kind of vacuole They were met with either in the cancer cells or in the stroma. Russell believed these to be parasites and classed them under the blastomycetes or sprouting fungi Sanfelice goes on to say that since the previous year he had been inoculating various animals with pure cultures of the saccharomyces neoformans and had noted that in certain cats which died after some months the blastomycetes inside the tissues took the typical forms of Russell s bodies, and in view of the appearance of the works of investigators who denied that Russell's bodies were blastomycetes he proceeds to report on the manner in which the parasites appear in these particular animals He contends that it is only by experiment that a positive result can be arrived at and it is owing to the fact that observers have depended on morphological features and staining reactions that the majority of observers have arrived at erroneous results When he ascertained that after injection of pure cultures of saccharomyces neoformans in cats typical Russell s bodies appeared in the tissues he investigated the tissues of normal cats, but in no case found Russell s bodies After inoculation with saccharomyces neoformans the fuchsin bodies were invariably found presenting, moreover the same form and arrangement, and with the same reaction to colouring material as the bodies which Russell and others had described as occurring in malignant tumours

Sanfelice inoculated 10 cats of different ages in the peritoneal cavity—some once others oftener When the cats died, on an average after three months, numerous sections were made of all organs The pieces of the tissues of normal cats were fixed in the same way as those of the inoculated animals In this way he demonstrated the fact that Russell's fuchsin bodies appeared in the tissues after the inoculation of cats with saccharomyces neoformans and he describes the structure and arrangement and properties of the bodies he found so as to prove their identity with the bodies regarded by Russell as blastomycetes and by Russell s opponents as products of cell degeneration In the inoculated cats the fuchsin bodies appear in greatest number in the lymph glands of the mesentery, in the spleen, and in the bone marrow They are easily recognised being perfectly round in form and in size varying from that of a micrococcus to that of a leucocyte As regards structure some of the bodies show a differentiation of the chromatic substance, while others take on the stain homogeneously with more or less intensity The bodies with differentiated chromatic substance possess either a kind of circle or an intensely coloured membrane with a less intensely coloured central part, or they show a deeply coloured centre surrounded by a circle only faintly coloured, or not coloured at all, and varying in breadth The homogeneously coloured forms take on a more or less deep colour In many of the parasites multiplication by budding may be seen in the same way as is seen in artificial cultures The buds grow from the smaller elements as well as from the larger, and may or may not remain attached until they attain the full size

In the tissues of cats the blastomycetes are found either lying free or inside the cells The free forms lie between

Spontaneous brain action is the basis of mental power In the infant at birth, as in the adult during quiescent states, the respiratory movements occur in a uniform series, while the child is awake spontaneous movements are seen in the limbs, especially in the small parts, the fingers and toes, but they occur in no apparent order and are not uniform in character, further, they are not controlled by the senses Spreading area of brain action is seen in movements when the child cries When three months old some control of these movements may be seen as the child is impressed by sight or sound, this is the earliest manifestation of potentiality for mental action, still there is no delayed expression of impressions received and no act of choice is observed At birth no signs of mental attention are seen, the infant shows many spontaneous movements corresponding to spontaneous action in many brain centres, but these are not controlled through the senses Later in the evolution of the infant this spontaneity may be momentarily arrested by impressions received through the organs of sense, show the infant a coloured object and coördinated action follows, spontaneity of movement is quelled for a few seconds, then the object is grasped by a prehensile action During the period of quiescence there is said to be an act of attention followed by adapted action The brain processes during the quiescence (period of inhibition and diatactic action)[3] then appear to be a pre adjustment of the brain centres which is expressed by the adapted act of prehension The physiologist cannot admit that the will thus arranges the brain, this act of attention results from the sight of the object The brain conditions necessary to an act of attention are (1) healthiness in the general characters of the brain (2) spontaneity, and (3) control of the brain by an impression through the senses, as shown by inhibition and the coordinated action following Attention as a physiological process is inferred to be action among the brain centres and may occur with or without subsequent expression The school-child must be tolerably quiet before he will think connectedly, a pause for thought is required in thinking over the answer to a question, there may be an expression indicating understanding without any verbal response Sometimes attention is best arrested by sight only, other pupils may be more easily impressed by hearing the spoken word

In cultivating the faculty of attention we need spontaneity in the brain which is the foundation of mental power, we must produce some impression on the brain and for the sake of exactness and simplicity in training a slight impression through one sense organ only is at first advisable, this is especially the case with difficult children The impression must be distinctly produced before a full act of attention can follow, the object must be looked at for some seconds before it is completely seen, as the figure in a proposition of Euclid, hence irregular eye movements may interfere with attention An excess of spontaneous brain action and any spreading area of activity such as corresponds to a number of disconnected thoughts may be indicated by a number of extra movements or fidgeting and vague, disjointed response in place of the signs of attention This is often observable with the signs of fatigue in restless movements of the eyes, the fingers, and the feet[4]

The modes of brain action may not be sufficiently well balanced or proportioned at the stage of evolution of the child to allow of uniform or prolonged attention A pupil may at times show marked mental confusion and make an absurd reply to a question This may arise from several causes 1 When a spreading area of spontaneous action in the brain is indicated by fidgeting while the child turns his head and his fingers twitch, he may ejaculate words irrelevant to the question, yet thoughts may be arising, though not under direction Such spreading and spontaneous brain action shows the need of further training, it may also accompany other signs of fatigue 2 Eye-movements need training in order that the impressions received by the brain may be exact When a child is working an addition sum, as the eyes move to successive figures in a column an extra or lateral eye movement may bring into view the wrong figure and lead to confusion 3 In reading eye movements may similarly bring the wrong line into view 4 In writing the pupil may copy the line above in place of continuing his exercise 5 Confusion may arise from the question being only partially heard, as from deafness, if the child be also short-sighted his difficulties are greatly increased in receiving teaching by demonstration 6 Rapid action of the heart with a quick pulse is common in nervous children and may be accompanied by other conditions of importance to health Such disturbance of the circulation may produce marked mental confusion 7 Sometimes an answer is irrelevant to the question put, yet it contains the reply to a former question, as to which a train of thought has continued Such delayed expression of thought is not a mindless condition, but shows an untrained mode of mental action Brain training may do much to prevent mental confusion and increase the power of attention

Memory depends upon reactivity of the impressions previously made upon the brain, these impressions returning in activity as a series in the same order as that in which they were produced originally Thus the child when directed to do so, repeats the numerals in their order of succession as previously taught This—as a matter of physiological action—depends upon the (cohesion) exactness of the impressions retained and upon adhesion of those impressions, so that energy flows along the pre-arranged nerve-paths from the brain-centre stimulated by your direction to repeat the lesson to those centres which were impressed in succession by previous teaching Such forms of memory remind us of the exact reproduction of a speech by the phonograph, where the dints made on the wax are retained and reproduce in their former order the vibrations causing sound, without variation or adaptability, no interaction occurs among the impressions on the wax. Overtaxing the faculty of memory producing many fixed impressions, to a certain extent tends to lessen mental adaptability fixing a certain number of impressions for thought and limiting free mental power A large number of automatic actions lessen the number of movements, idiots often have repeatative movements and but little freedom of action

[3] See Mental Faculty p 39 Cambridge University Press
[4] See cases op cit.

THE PARASITE OF CANCER

BY WILLIAM RUSSELL, M D, F R C P EDIN,
LECTURER ON PATHOLOGY ROYAL COLLEGES SCHOOL OF MEDICINE EDINBURGH ASSISTANT PHYSICIAN TO THE ROYAL INFIRMARY EDINBURGH.

RECENT papers have re awakened interest in this country in the question of the parasitic organism of cancer and the time seems opportune for a review of the question It is not my intention here to argue in support of the infective nature of cancer, but I may state that increasing clinical and pathological experience only deepens my conviction of its infectivity I am fully aware that many minds are ranged on the other side—they include some of my personal friends, but I console myself by remembering that it took some of my friends almost a decade to accept the bacillus tuberculosis as the etiological factor in tubercle Accepting as I do the doctrine of infectivity my present purpose is confined to the question of the infective element

Up to 1890 Albarran Darier, Thoma, Wickham, and Sjöbring had described structures in the cells of cancer which they believed to be parasitic, and all of them, with the exception of Thoma regarded the parasite as belonging to the protozoa In 1890 I published a paper in which I described what I believed to be a parasitic organism in cancer The organism was described both in an extracellular and an intracellular form They were held by me to be blastomycetes and I provisionally called them "fuchsin bodies" The subject was taken up with considerable ardour and it was found that bodies similar in appearance to the extracellular forms described occurred in morbid conditions other than cancer Some of these observations by others were correct, some were wrong, as sufficient allowance was not always made for the care with which I had excluded the possibility of the extracellular forms being some of the things they were said to be Still the fact remained that identical bodies were found in other morbid conditions and this fact became a stumbling block After this other work appeared which dealt with the intracellular structures in cancer cells and in which it was attempted to differentiate the intracellular appearances into organisms, degenerations of cell protoplasm, or degenerations of cell inclusions not parasitic The organism was regarded by these observers as a sporozoon, or at all events

reproduce In all he found the same appearances and he has no doubt as to their nature He describes and figures the parasite both as extracellular and intracellular From one of his cases he obtained cultures of blastomycetes Inoculation of guinea pigs with these cultures caused death of the animals and the production in many of the organs of little whitish nodules These were of the nature of granulomata, only with more of the characters of new growth than of inflammatory products The nodules showed many parasites, young and degenerated, and Roncali found them to be identical with a blastomyces isolated by him from an epithelioma of the tongue Roncali undertook and records a large series of experiments to prove that the parasites had not reached the tissues from the air after removal from the body He showed by these that dead tissue, whether of normal organs or of tumours, was not suitable for promoting the growth of blastomycetes and that blastomycetes show no preference for the tissue of malignant growths Having disposed of the question of contamination he then discusses the question of the etiological factor in human neoplasms and his conclusion is that the genetic connexion between the blastomycetes and malignant tumours is proved

Work of Other Observers

Busse cultivated a blastomyces from a sarcoma, as has been already referred to Kahane got pure cultures of a blastomyces from a cancer of the uterus Mafucci and Sirleo have a paper on the blastomycetes as the cause of origin of malignant tumours, but their results are mainly negative while not denying the possibility of a connexion An important case is recorded by Corselli and Frisco of sarcoma of the mesenteric glands, from which they were able to isolate blastomycetes which produced similar growths in guinea pigs, rabbits, and dogs They got pure cultures of blastomycetes in the patient's life-time and after death from fluid from the abdominal and thoracic cavities Curtis had a case, referred to by Sanfelice and Roncali, of a myxomatous tumour in a man from which he obtained cultures of blastomycetes and by inoculation produced a tumour in a rabbit

Conclusions

To anyone going carefully through Sanfelice's work there is only one opinion possible and that is that it is a very careful and beautiful piece of investigation and research To me it points in only one direction The links in the chain of evidence are simple and strong and may be thus summarised Investigating blastomycetes he finds appearances similar to those described as occurring in cancer both inside and outside the cells Working on these lines he familiarises himself with the appearances presented by the parasite in the tissues and organs of different animals He finds that in different animals the pathogenic effect varies from a somewhat rapid infection with great proliferation of the parasite down to a much less acute infection In dogs, by inoculating them into the peritoneal cavity, he recovers the parasite from the lymph glands and passes them through another dog, and so on Having in this way modified the parasite by the chemicovital influences in the dog's body he inoculates the mammæ and the testicles of dogs with the modified organism and finds that it produces epithelial growths with metastases

The success of others in cultivating blastomycetes from tumours mainly malignant adds confirmation to Sanfelice's results Roncali is one of these, but his confirmation is largely from the histological standpoint and he was avowedly greatly aided in his observations by his acquaintance with the appearances in the tissues produced by inoculation with the saccharomyces neoformans as followed by Sanfelice I have avoided reference to controversial questions although Sanfelice and Roncali somewhat warmly criticise the work of those who considered the structures described as degenerations, Those interested in that negative aspect of the problem will find it fully referred to in various of the papers I have referred to It seems almost needless to add that there remains abundant work to be done in this important and attractive field One is pleased to see that a British worker whose name is already associated with work on the intracellular forms in cancer is obtaining positive experimental results That blastomycetes occur in malignant growths appears to be established That the sporozoa may be the cause of some malignant new growths is not necessarily quite put out of court, but their cultivation will, I take it, be a still more difficult matter With the amount of positive work before us the evidence is incontestably in favour of the blastomycetes.

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SIX MONTHS' ABDOMINAL SURGERY IN WESTERN AUSTRALIA

BY E PAGET THURSTAN, M D, B A CANTAB
M R C S ENG &c

IN the course of the past six months my partner, Dr E J A Haynes, has performed seven or (reckoning a lithotomy) eight abdominal operations Seven of these eventuated in complete success, but in the eighth the patient revealed advanced malignant disease and the operation was therefore abandoned

CASE 1—This was a Littré's colotomy for malignant disease of the rectum The mischief was too far advanced for excision of the bowel to be advisable The chief point of interest in this operation was that, in accordance with the teachings of Mr Reeves, a small abdominal incision was made, the colon was drawn out and stretched taut, and a glass rod four inches in length was passed through the mesentery and anchored to the skin of the abdomen by pieces of silk attached to pieces of strapping No stitches were used to fix the bowel to the wound The gut was opened on the fourth day and the rod was removed on the sixth day The result was gratifying There was a capital artificial anus in a good position and easily kept closed. Great ease and relief were given, enormous fæcal accumulations were got rid of, and a decided improvement in general health followed

CASE 2—This was a nephrolithotomy for extensive pyelitis The history disclosed a fall from a horse 10 years previously resulting in extensive bruising and followed by the passage of much blood from the penis which was regarded at the time as coming from the left kidney The patient recovered his health and the hæmorrhage ceased, but subsequently there were attacks of colic followed by the passage of gravel This is interesting as confirming the view that traumatism is frequently the starting point of gravel After some years of fairly good health he began to suffer considerably from lumbar pain and aching, to lose flesh, and, at a month before the operation, to pass pus Tritipalm, terebinthinates, iron, blistering, and cupping were tried but they all failed to reduce the amount of the pus, so it was decided to operate The patient having been raised by a pillow to make the left flank tense Dr Haynes made an incision which extended from the outer border of the erector spinæ half an inch below the last rib for four inches downwards and forward towards the crest of the ileum Passing through the lumbar fascia between the transversalis and quadratus lumborum, the kidney was easily found Palpation with the finger revealed no stone An exploring needle mounted on a long holder had been prepared and on the second puncture a

newly formed cell elements and usually in groups, seldom singly The number of parasites in one group varies Sanfelice has counted as many as 30 in one group Sometimes these are so closely clustered as to present a mulberry appearance, sometimes they lie separated from each other and, moreover, at such equal distances that they have the appearance as if some cement substance kept them at equal distances and prevented direct contact of the deeply coloured substances Occasionally one can see quite distinctly that this apparent cement substance is formed from the circles of hyaline membranes which by touching each other conceal the outlines of their peripheries In some groups of blastomycetes the hyaline membranes are very apparent and their borders are distinctly seen The endocellular parasites are usually much smaller than the free forms If there are only one or two in a cell they are moderately large, if many they are small The number of enclosed parasites varies, as do the free forms and they present the same appearances According to the position in which the cell containing the parasites is seen by the observer the nucleus appears either pushed to one side or in the centre of the cell surrounded by parasites It often happens that small parasites in considerable numbers are found lying close together in a ground substance without any nucleus being visible It is possible that in such cases the nucleus is lying under the parasites so that the eye of the observer cannot detect it Another feature is the fact that they are found in the neighbourhood of young newly formed cells and do not appear in the parts where the cells are undergoing degeneration He is unable at present to say why the parasites should appear in the form of fuchsin bodies only occasionally in dogs though constantly in cats He concludes by stating that this communication is intended to prove (1) that all authors who contend that Russell s fuchsin bodies are not blastomycetes have not hitherto brought forward experimental proof that they are cellular degenerations, (2) that through the inoculation of cats with pure cultures of saccharomyces neoformans the typical bodies are produced which have been described by Russell and others as occurring in malignant tumours in man and in certain chronic inflammatory processes; and (3) that these fuchsin bodies are not found in normal cats, but only appear in these animals when they are inoculated with pure cultures of saccharomyces neoformans, or with pieces from the tissues of cats, containing the typical forms of Russell s bodies A coloured plate illustrating the various forms of the parasite is appended to Sanfelice s paper It may simplify this question to say here that he states that the pathogenic blastomycetes hitherto cultivated closely resemble one another on artificial media and in morphological appearances, while at the some time their pathogenic action varies widely

The Experimental Production of Epithelial Tumours and Metastatic Epithelial Growths

Having settled the morphological facts the next still more interesting point was to ascertain whether the injection of these blastomycetes into animals susceptible to malignant tumours would bring about the formation of neoplasms similar to the malignant tumours observed in man Sanfelice approached the solution of this problem by passing the blastomyces with which he was experimenting through a number of dogs—that is, from dog to dog By this method he arrived at positive results in two cases In one of these the dog had been inoculated in the two posterior nipples with the blastomyces which had been passed through several dogs After a slight inflammatory reaction at the site of inoculation the nipples remained apparently normal until about a month after the operation when signs of a neoplastic process became evident The animal died 10 months later with marked cachexia, tumours in both teats, showing retraction of the nipples and tacking down of the skin, and secondary growths in the inguinal and abdominal lymphatic glands All these showed the typical structure of adeno carcinoma Sanfelice's colleagues Biondi and Carboni confirmed this opinion Numerous illustrations of the naked eye and microscopical appearances are appended to his communication No parasites were observed in the centre of the primary tumours A few were observed in the peripheral part of the primary tumour and in the metastases in the glands He could obtain no cultures from any of these growths, the explanation he offers of this is that when the parasite has so grown accustomed to its surroundings as to take on the typical characteristics of Russell's bodies, and to become capable of producing malignant tumours, from that time it becomes incapable of growing in artificial media (He evidently means by this the ordinary media on which he had grown his saccharomyces neoformans) In order to be grown artificially the parasite must occur in the form in which it occurs in guinea pigs, &c —that is, in the form usually found in infections running a rapid course and seldom in those running a more prolonged course If blastomycetes are isolated from malignant growths of man or animals he holds that they must have been present in the growth in both forms

The foregoing positive result obtained by Sanfelice is so important that the other cases may also be given A dog was inoculated in both testicles After one and a half months swelling of the testicles and penis became evident and gradually progressed The animal died after five months from accidental poisoning The animal had been seen during life by various authorities, among them Dr Marino Zuco of Rome who agreed that the growths were of a malignant nature The examinations of the parts showed adeno carcinoma of the testicles, with secondary growths in the neighbourhood of the penis and glans The parasites were much more numerous than in the previous case, this being, he considers, due to the earlier stage at which the animal died He explains that the longer the parasite is present in the tissues the fewer they become They presented the typical features of Russell's bodies and as in the previous case no cultures could be obtained from the tumours Further inoculation experiments are given, but these need not be quoted in detail It is sufficient to state that a few positive results were obtained by inoculating dogs from the new growth in one of the cases referred to above

Inoculation into the Circulation and Abdominal Cavity of Dogs and Cats

Inoculation of dogs in the jugular vein led in the course of from one to one and a half months to connective tissue changes in which the parasite was present in small numbers and in its cultivable form It was by intraperitoneal injection from dog to dog that he obtained the parasite which produced the epithelial growths already referred to In the case of cats he found that the saccharomyces neoformans inoculated into the abdominal cavity or veins brought about the same changes as he had observed in the bodies of dogs inoculated in the same way In the case of cats he confirmed his opinion that when the parasite had been long enough in the body to assume the typical forms of Russell s fuchsin bodies they were no longer cultivable in artificial media If however, the cats were killed soon after inoculation cultures could be obtained, the parasite then presenting the forms which occurred in guinea pigs and rabbits where the infection ran a more acute course One of the conclusions he draws from his experimental work with the saccharomyces neoformans is that it appears in the tissues of animals in two forms In one form it possesses a capsule and is cultivable in artificial media In the other it has no capsule, is identical with the fuchsin bodies of Russell and cannot be cultivated in artificial media This second form is only observed in the organism when the parasite has lived in it for some time

Roncali s Histological Contribution

Professor Roncali of Rome has taken a leading part in the appreciation of Sanfelice's work and has published important papers on the histological appearances in some malignant tumours in man He was attracted by the fact that in a case of adeno-carcinoma of the ovary there were appearances identical with those described by Sanfelice and he came to the conclusion that they were due to the same cause, the presence of a parasitic blastomyces He also noted the resemblance between the appearances in his case and those described in cancer and regarded by some authors as parasitic He acknowledges with scientific justice and frank generosity that all authors had seen real parasites but that they had erred in assigning them a place in the animal kingdom He thinks they were led by a false prejudice, wishing to see sporozoa This circumstance had proved, he thinks the inexhaustible source of all the errors made He records three cases, two of adeno-carcinoma of the ovary and one of adeno-carcinoma of the colon with secondary involvement of the great omentum and mesentery The detailed description of these cases it is unnecessary to

the pulse never rose above 88 The wound healed by first intention The catheter had to be used for the first four days and hypodermic injections of morphia were given to control restlessness and to procure sleep The stitches which included peritoneum, skin and muscle, were removed on the ninth day and the patient was allowed up on the seventeenth day There is every prospect of a complete recovery in this case.

I will only refer to the lateral lithotomy case by saying that 15 stones, ranging in size from that of a pea to that of a hazel nut, were removed and that some months subsequently to the operation it was found that a fresh stone had descended into the bladder Dr Haynes gradually dilated the urethra up to No 18 English, which enabled the patient to pass the stone without further operation or subsequent ill effects

These cases were alike in showing a gratifying absence of all symptoms indicating the slightest defect in the technique All those patients who could have recovered did recover without rise of temperature, suppuration, or other alarming symptom. It is thus that the asepticism of the operator and his tools is best demonstrated In private practice one cannot carry out all the minutiæ enjoined in the most recent works, but such a record shows that all which is really essential can be carried out even by the general practitioner The principal authors whose recommendations we have followed have been Treves, Jacobson and Kelly The sponges are cleaned by the method so clearly described by Greig Smith—viz, with oxalic acid and hyposulphite of soda The instruments are boiled for one hour in a solution of one drachm to a pint of carbonate of soda At the time of the operation they are placed in a solution (one in 40) of carbolic acid and are subsequently transferred to trays containing cold boiled water This water had been boiled for an hour and then placed in metal cans covered with a muslin cap The abdominal sponges are squeezed out of a normal salt solution as recommended by Kelly and Robb, and are placed in a metal basin in boiled water apart from the rest The ordinary sponges are received by a nurse as they become soiled and are squeezed out of a solution of one in 40 carbolic acid and are passed on to another basin of water which has been sterilised by boiling as above The nurse has strict injunctions to keep the water hot in which the abdominal sponges are placed, so that they are always handed over warm Any sponge or instrument which is brought accidentally in contact with any unsterilised object is at once put out of action The hands of the operators and assistants are first scrubbed in hot water with plenty of soap We have not yet arrived at the nicety of providing a separate nailbrush for each man, as is enjoined by Kelly, but care is taken to sterilise the nailbrushes as well as other things The next wash is in a solution of the double iodide of mercury and potassium A final wash in boiled water is followed by the wearing of rubber gloves up to the moment when the actual operation begins As regards the toilette of the patient we do not in any way depart from the directions in the text-books Chloroform is always used as the anæsthetic and subsequent vomiting has been conspicuous by its absence This Dr Haynes considers will always be the case when operators are careful to draw down the omentum before closing the abdomen Two sponges are usually left in the abdomen—one in Douglas's pouch and one anteriorly until the last moment When the stitches are in position and ready to be drawn tight these sponges are withdrawn Thus all oozing is absorbed to the last moment and the peritoneal cavity is left dry Another detail is worth mentioning—viz, that before the patient is removed to bed a pint of normal saline solution is injected into the bowel and this is repeated in six hours This seems to prevent the thirst of which we so often hear To prevent accumulation of flatus the rectal tube is introduced for two hours twice a day at first

Perth West Australia.

UNIVERSITY OF WALES.—The annual meeting of the Court of the University of Wales was held on April 21st under the presidency of Dr Isambard Owen, the senior deputy chancellor The court selected Dr David Thomas of Ystalyfera, Swansea and Mr E Davies, M R C S Eng, to represent the university at the forthcoming congress of the Sanitary Institute Dr Isambard Owen was unanimously reappointed deputy senior vice chancellor and the Hon G Kenyon junior deputy-chancellor for the ensuing year

ON A CASE OF CEREBRAL ABSCESS ILLUSTRATING CERTAIN FORMS OF APHASIA

BY ALEXANDER MILES M D, F R C S EDIN
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THE following case appears to us to be worthy of being put on record as an illustration of one of the ways in which the cerebral speech mechanism may be interfered with by a collection of pus in the temporo-sphenoidal lobe The abscess was secondary to middle ear suppuration and for a time ran the usual clinical course of such cases It was evacuated and the patient's urgent symptoms disappeared On the following day, however, it was observed that he showed symptoms of paraphasia and "word intoxication" For the next two months he continued to exhibit peculiar forms of interference with speech, notably an inability to apply the correct names to objects, a tendency to employ the verbal instead of the nominal form in identifying objects, and frequent use of unintelligible language although there was no word deafness

The patient was a man 22 years of age, and was occupied as a labourer He was admitted to Leith Hospital on May 13th, 1896, complaining of pain and swelling in the region of the left ear There was nothing in his family or personal history to throw any light on the condition from which he suffered Three months before admission—in February, 1896—his left ear began to "run" but this did not trouble him much except for the accompanying deafness Sometimes there was a good deal of discharge, then for a time there would be none Four days before admission he caught a "severe cold" and on the next day the left ear became sore and painful with swelling all round it The pain was so great for the next two days as to prevent sleep

On admission this painful swelling was noted particularly in front of the ear and over the mastoid. Soon after admission relief was obtained by the escape of a large amount of discharge There was no vomiting giddiness, or loss of sight Hearing was markedly diminished on the left side On the 14th the left side of the head was slightly more prominent than the right The swelling was greatest in front of the tragus but it was not now tender There was no facial paralysis On the 15th the patient had a bad night from pain on the left side of the head. The ears were examined, the left was found to contain much yellow fluid pus and the membrana tympani was obscured by granulations, the right ear contained wax The patient heard the ticking of a watch on the left side only on contact and better on mastoid contact It was heard by the right ear at a distance of 18 inches and on median contact was better heard by this ear The disease therefore was probably still only in connexion with the middle ear and mastoid cells On the 16th there was pain on both sides over the forehead but no giddiness or staggering The temperature reached 102 5°F There was no rigor and very little discharge from the ear On the 17th there was less pain and only on the left side of the forehead On the 18th the pain and discharge were less and there was tenderness over the mastoid On the 22nd an operation was performed The mastoid antrum was opened and the middle ear was scraped out The fluid injected by the mastoid opening passed out by the external auditory meatus but not very freely There was not much pus and but little smell The patient had a good deal of pain in the afternoon At 3 30 P M half a grain of morphia was administered subcutaneously Improvement continued till the 28th when the patient became quite insensible, very noisy and restless and had to be tied down. At 10 30 P M on that date the patient was trephined over the posterior part of the temporo-sphenoidal lobe With an aspirator needle pushed forwards and slightly downwards pus was at once struck and it escaped freely The wound was further opened up drained and dressed with iodoform gauze The pus was in the temporo-sphenoidal lobe as well

calculus was detected An incision was made into the kidney and the stone was quickly extracted It weighed two and a half drachms Hæmorrhage was free but it was easily controlled Deep exploration revealed no other calculus, but one of the gentlemen who were assisting in the operation thought that the kidney must be too disorganised to be worth keeping Dr Haynes, however, decided otherwise Iodoform was blown into the kidney wound, into which an indiarubber drainage tube was then inserted which was left in for three days, pus and urine escaping by it on the first day but not afterwards The man made a rapid recovery from the operation and left the hospital on the thirteenth day For three weeks pus continued to pass in fairly large quantities in the urine but ultimately it ceased. In a month the patient resumed work completely cured—showing the wisdom of the decision to retain the kidney

CASE 3 —This was a double oöphorectomy The patient had been an invalid for years She was unable to earn her living and suffered tortures at the menstrual periods Both ovaries were found to have undergone cystic degeneration One cyst contained, perhaps, half a pint of fluid and was apparently on the point of bursting The patient made an uninterrupted recovery and left the hospital in three weeks She is now in service entirely cured. She has menstruated once since the operation without pain or inconvenience

CASE 4 was more interesting from a diagnostic aspect than from a surgical point of view The patient was a man who had been living a hard life on the "fields," to the hardships of which in the first instance he attributed his symptoms He was extremely emaciated and slightly jaundiced and he had a tumour over the liver and some slight ascites The only possible alternatives were hydatids and malignant disease To clear up the doubt some fluid was withdrawn and was submitted to a pathologist for microscopical examination He reported that he thought that he had detected hooklets, but he was not sure On this an operation was arranged, but on opening the abdomen it was at once apparent that we had to deal with advanced malignant disease and the abdomen was therefore forthwith closed The patient rallied from the operation but he died on the next day It was noticeable that the ascitic fluid was deeply stained with blood As this was probably from the puncture it tends to show that exploratory needles can do harm at times

CASE 5 —The patient had an enormous hydatid in the liver Before coming under our care he had been treated at the public hospital for nine months for "congestion of the liver" An incision two and a half inches long was made over the most prominent part of the tumour, the incision passing through the fibres of the right rectus There were no adhesions The tumour was isolated by sponges and was then aspirated About two gallons of fluid were contained in it A small incision was made in the sac and the tumour was brought out by an assistant who grasped the lips of the out with his index fingers It was kept out by pressure forceps, the incision was extended, and ultimately the parent cyst was completely removed The edges of the wounds in the sac and the abdomen were stitched together and an inch indiarubber drainage tube was inserted This was left in for a week The wound was dressed daily with iodoform gauze The patient made an uninterrupted recovery

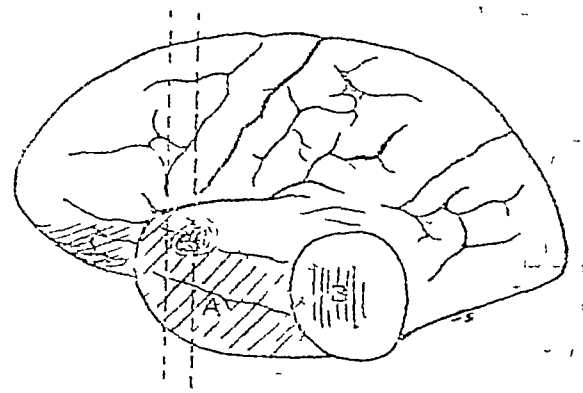
CASE 6 was also an operation for hydatid and from every point of view it was a most interesting case At least five tumours could be made out by palpation A large one was situated in the left iliac region and another large one could be felt in Douglas's pouch Mr White of Fremantle, Dr Stewart of Guildford, and Dr James of Perth saw the patient in consultation and agreed with Dr Haynes that it was probably a case of multiple hydatids A median incision of three inches was first made This had subsequently to be enlarged upwards towards the umbilicus to five inches The first two cysts dealt with were difficult to bring to the surface They were therefore aspirated and brought out of the abdomen interlocking stitches were inserted in the omentum and then the sacs were removed In the case of two others it was not feasible to do this, so after removing the mother cyst the investing sacs were sewn up and dropped back in the abdomen Very great difficulty was experienced in isolating the tumours, so tangled were they with the mesentery and the omentum The fifth cyst (the one in Douglas's pouch) proved the most awkward to handle of all The mother cyst had an exceedingly fragile limiting membrane After part of the fluid had been withdrawn the mother cyst slipped off the point of the needle back into the pelvis The investing sac was solely peritoneal tissue and was so friable that it ruptured at a touch The mother cyst also tore when it was being removed and about a pint of daughter cells—lovely globes of iridescent colour—escaped into the sac These were carefully removed with an ordinary plated dessert-spoon The greatest difficulty possible was experienced in suturing off the sac owing to its depth in the pelvis and the presence of a three-months' pregnant uterus One of the cysts must have contained a gallon of fluid and another cyst nearly half a gallon An additional point of interest in this remarkable case was that at the critical part of the operation the patient began to vomit violently and the heaving impulse forced the bowels through the abdominal wound Fortunately there were several abdominal sponges in hot water in readiness and the protruding mass was quickly enveloped in warm sponges and the expulsion was controlled As soon as the patient was once more deeply narcotised the bowels were easily returned and not the slightest subsequent ill effects were experienced Had it not been for the abundant supply of suitable sponges this untoward accident might have had more serious results The day was most oppressive, the temperature of the operating room being 103° F Subsequently there was no vomiting or bad symptom of any kind, except that on the morning after the operation, while the nurse was fixing her bedclothes, the patient suddenly grew faint and exclaimed that she was dying Dr Haynes was rung up on the telephone, and an enema of brandy was ordered pending his arrival at the hospital He found that the patient had recovered from her seizure, but that she had lost the use of the extensors of her right arm and that there was marked wrist-drop and loss of sensation which were doubtless due to embolism Under massage and electricity she has since considerably recovered the use of her arm. Dr Haynes has operated in upwards of 50 cases of hydatids—mostly in New South Wales where they are much commoner than in this colony—and he has met with the same thing before To our surprise the patient did not miscarry

CASE 7 also was one of great interest The patient had been under four different medical men who had diagnosed five different diseases—gall stones, lead poisoning, floating kidney, intussusception, and ulceration of the bowels When on his coming to me I offered a sixth opinion—appendicitis—he was naturally dismayed There was a swelling in the right flank in the region of the cæcum which was resonant with vague dulness round Severe spasms of pain began in the præcordial region and travelled backwards along the colon to the enlargement in the flank which swelled up visibly at these times There was tenderness over McBurney's point As Dr Haynes concurred in my diagnosis, and Dr Stewart, whom we called in, was equally positive, the patient accepted our dictum that an immediate operation was imperative Fearing that there might be obstructive bands of adhesion to deal with the incision was made in the median line and not over the tumour The omentum was found to be adherent to the parietal peritoneum and the small intestines were also adherent to the omentum, which rendered the early part of the operation full of pitfalls from the difficulty of distinguishing between parietal peritoneum and omentum The large bowel was thickened and injected, the longitudinal band acting as a constriction to the dilated pouches of the colon Great difficulty was experienced in bringing the cæcum into view, the omentum being positively ragged as well as adherent to the ileum The appendix was swollen and enlarged and was slightly adherent to the peritoneum over the psoas, but it was easily separated At one point it was almost ulcerated through It was divided between sutures and the stump was sewn by a continuous over stitch So softened were the structures that it was difficult to make the stitches hold It was then invaginated into the cæcum and the serous edges of the fold were united by mattress sutures The severed appendix after being hardened in spirit was opened and examined It was found to contain two grape seeds, three fishbones, a piece of eggshell, and a tin tack Rectal feeding had been necessary for two or three days prior to the operation and for three days after nothing was given by the mouth Owing to the damaged state of the colon—and presumably also of the rectum—even peptonised beef tea administered by the bowel caused hiccough and flatulence The rectal tube was introduced every two hours and enabled the flatus to pass, but the hiccough was very annoying The temperature was always normal and

of pain in the head and he vomited greenish yellow fluid He had a peculiar bluish or grey colour, similar to that which he used to have when the pressure was great in his head. He became dull and drowsy The tongue was deflected slightly to the right When shown various things he could not name them, but could tell what they were for in the verbal form—e g, a bandage he said was "for putting round head" and keys were "for opening doors" The pulse was 56 and soft All pressure was removed There was no sign of pus about the hernia In the after noon the pupils were unequal for a time There had been no vomiting since the bandage was removed On the 5th at 11 A M the pulse was 84 The patient was less drowsy, he answered questions more readily, and gave evidence of amnesia of nouns but no word blindness He could read "Leith Monthly Visitor" fairly well, slowly but correctly He was shown a picture of a railway carriage which he called "Eslanda" He called the flag in the guard's hand 'thing to go round to go away,' and the guard he called "man" He could not name a travelling trunk which was also in the picture Some pus was found on dressing the wound The hernia was larger A drainage tube was introduced into the extra dural space The amnesia of nouns was seen particularly in connexion with the less familiar objects He knew a safety pin, though he could not name it He named a half-crown which is more familiar and often used, this may have been what Wyllie calls an "overflow" into the other hemisphere or partial education of it to common percepts There was also 'articulative ataxy", he missed out parts of words—e g, "wrying" for "writing" On the 6th the patient's condition was similar He was less drowsy On the 8th the tongue was still deflected to the right, otherwise there had been much improvement since the drainage-tube was inserted On the 10th the patient was very drowsy During the night there was pain across the forehead On the 11th and 12th the discharge was freer but it smelt badly On the 15th although the patient's general condition showed improvement he could not even repeat the names of objects which were mentioned to him When shown a key and asked to say "key" he said "exstrat', when a knife was shown to him and he was requested to say "knife" he said "a maggie", and on showing him a chain and asking him to say "chain" he said "mobelle." Therefore here word intoxication and paraphasia are more marked On the 19th he was examined by Dr William Elder On attempting to read he could spell out the words and pronounce small words but could not read a simple sentence through so as to understand it His memory for nouns was worse He understood spoken speech quite well He could not write his name but could write to dictation A B C, D, &c He was more irritable Dr Elder notes "This is probably due to spread of condition upwards It is curious that no word deafness was noted at this examination Has the disease now spread towards the occipital lobe or angular gyrus?" On the 22nd the patient was not so well He complained of a good deal of pain especially referred to the forehead On the 23rd he had great pain and cried out a good deal There were some spasmodic movements of the left leg From the 24th to the 27th the patient's condition was getting worse He was very drowsy and heavy The pulse was slow the temperature was subnormal, and he did not seem to understand when spoken to The right grasp was absent and the left was very weak, the right knee jerk was present and the left was absent On the 28th at 9 30 A M there was Cheyne-Stokes respiration The patient was unconscious He swallowed with difficulty There was no discharge There were no localising symptoms A pair of sinus forceps was passed forwards and somewhat upwards close to the bone and about half an ounce of thick, green very foul pus escaped A drainage tube was inserted. Immediately afterwards the pulse increased to 84, the respirations were full and regular The reflexes could be got more readily At 5 30 P M the patient was conscious, though deeply asleep as a rule He tried to speak but could only get out a jumble of words On the 29th the patient was operated upon by trephining anteriorly to the hernia The brain was very tense after the dura mater had been incised No pus was got At 10 P M the temperature was 105° and the pulse 142 The patient was quiet, sometimes moving a hand. On the 30th at 1 20 A M the pulse was thready and uncountable The patient's breathing was laboured During the day he gradually became worse and at 6 30 P M he died From July 22nd onwards the signs had become more those of a general compression without localising symptoms The second stage of the illness had shown an increase of the already existing paraphasia and amnesia of nouns, with some articulative ataxy, and finally death took place from compression

A post-mortem examination was made on August 1st, 1896 The head only was examined Behind the left ear was a hernia cerebri (fig 1) This had been developed

FIG 1



A Extent of primary abscess. B. Pedicle of hernia cerebri, dotted line outline of hernia indicated by the firm line

in the upper part of a vertical wound over the mastoid process The hernia measured two by one and a half inches From this a recent operation wound extended forwards in the temporal region No pus was noticed in the ears On removing the calvarium the dura mater was found to be congested and the convolutions were seen to be flattened On the left side the dura mater was adherent to the brain over part of the lower surface of the temporal lobe in relation to the petrous portion of the temporal bone

FIG 2

Section from the position shown in Fig 1, showing the extent of primary and secondary abscesses. 1 primary abscess. 2, Secondary abscess. Is. Island of Reil. c, Claustrum. L N Lenticular nucleus.

There was a depression in this bone over the situation of the superior semicircular canal, to which the dura mater was adherent firmly by a small process of fibrous tissue The hernia was connected with the posterior third of the middle and part of the lower temporal convolution A recent operation wound in the anterior part of the superior convolution was surrounded by extravasation into the brain substance which also extended to the adjacent parts of the ascending frontal and ascending parietal convolutions There was laceration of the cortex in the inferior temporal convolution where the dura mater was adherent In the posterior part of the inferior occipito-temporal and inferior temporal convolutions was a swelling at

as in the meninges This rapid abscess formation was the first evidence of intracranial mischief Hitherto no aphasia had been noted

On the 29th the patient, though dull and stupid, was quite conscious He was irritable and anxious to get up There were evidences of paraphasia and word intoxication He called a pipe a "knife" and matches "knife" There is a certain association of these objects with the idea of filling and lighting a pipe It is interesting to note that there had been abscess formation in the temporal lobe without causing aphasia or any special localising symptoms The only symptom noted was the great pain on the left side, particularly over the forehead, but that, along with the rise of temperature, occurred a fortnight before operation On the 30th the patient was still restless and anxious to get up Marked "paraphasia" was present When asked what day it was he answered, "10 o'clock" He asked to be allowed to get up for "two weeks," meaning two hours When shown a watch he called it a "clock," but he could not read the time correctly He knew that his answers were incorrect and indicated by gestures his annoyance at this In the evening he complained of pain at the back of the "right nose' and asked for the "night office," meaning the house surgeon On the 31st he was still confused but looked better He used wrong words for everything but wrote well to dictation and copied writing fairly well, therefore no word deafness or visual aphasia existed He understood what he was writing and copying, there was no paragraphia During examination he became irritable and refused to stay in bed On June 1st he determined to get up on to the "drawer," meaning the sofa On the 3rd he was still anxious to get up, took food better, and had a good appetite He could tell the time on a watch but could not name a key or a pair of scissors On the 4th at about 4 A M he somewhat rapidly became dull and stupid and complained of great pain in the centre of the forehead and over the left eye, he kept groaning, did not know where he was, and could not understand what was said to him He answered questions with great confusion of words so as to be quite unintelligible At 3 P M he was still dull and drowsy Q —"Have you any pain?" A —"Yes" Q —"Where?' A —"I'm all right" Q —"Where is the pain?" His answer to this question was confused gibberish spoken very deliberately On dressing the wound it was found that the pus was not draining freely A probe passed inwards, downwards, and forwards gave exit to a quantity of thick, stinking pus, apparently extra-dural, over the roof of the tympanum After the dressing the patient spoke freely but did not appreciate or use correct words Q —"What day is this?" A.—"6 o'clock" Q — 'What time do your friends come?' A —"20 past six" Before these questions were put, he heard the resident surgeon ask the nurse if this was visiting night and when his friends came, therefore to some extent these answers were suggested The condition of the patient had become worse on June 3rd, so that while, as formerly, he could not name a pair of scissors he could not now even express the abstract idea of cutting as being their use, and the report of the following day (June 4th) bears this out With the paraphasia there was now for a short time some evidence of word deafness, so that he talked gibberish and did not appreciate his mistakes, indicating an affection of the auditory ("word hearing") centre, probably simply by pressure, as the exit of pus relieved the condition This is not negatived by the correct answer "Yes" to the question as to pain, as this is one of the very common words for the appreciation of which the right hemisphere may be educated

On the 5th at 11 A M the wound was dressed Drainage was still imperfect In the afternoon the patient complained of great pain At 8 15 P M he was much worse, he presented a pale grey colour and was drowsy The pulse was 60 The wound was explored with a director and a good deal of pus escaped both from the cerebral and the extra dural collections Slight left facial paralysis was observed After dressing the pulse was irregular, varying from 60 to 72 per minute Here there was evidence of general compression, looking to the relief obtained by the evacuation of pus, and affection of the facial nerve as it passed in relation to the middle ear From 10 30 P M to midnight the patient was restless and noisy, calling out loudly, sometimes singing out his words There was almost constant trembling of the whole of the left side, his right hand and arm were cold, and both his eyes were slightly open while he was asleep At a quarter past twelve o clock morphia was given hypodermically On the 6th at 4 A M there was great pain which could not be localised The patient talked incoherently At 5 30 A M he was quieter again The wound was dressed at midnight The patient uttered no complaint of pain but said that he felt better He was sensible The pulse, which was irregular, was from 60 to 80 On the 7th, at 4 A M, the patient was awake Q —"Are you better?" A —"No" Q —"Will you take some milk?" A —"Give me some 'Diest,' the stuff I had before" (meaning beef juice) Slight tremor of the left hand, arm, and leg was observed The pulse was 90 and regular At 6 A M the patient, who was awake, looked bright and understood everything which was said to him He spoke freely and sensibly, but could not give some things their proper names—e.g, wanting paper he asked for "bread" The pulse was 84 and regular The patient had slept well all night and was not drowsy or stupid when awake At 7 P M he could read words—e g, "Edinburgh"—correctly "Society" he pronounced *sohecty* and "Scottish" *slottidge* Asked to name figures in a picture he seemed to understand what was wanted but gave absurd names to things, mixing up syllables so as to make words of no meaning There was no word or figure blindness, but there was paraphasia in answering On the 8th the improvement continued He slept well, felt well, and spoke to the other patients He read a little for his own amusement, said he felt "fine," and wanted to get up. When shown a pencil he called it a "kencil" A safety pin he called a "nail cut,' a knife a "knife," a key a "knife," a bunch of keys "kniffs" (knives), and a watch a "handle" He could tell time on a watch correctly There was no word deafness as shown by his ability to read for his own amusement On the 9th there was still some paraphasia On the 12th a hernia cerebri of the size of a small hazel nut was noticed On the 13th the patient complained of some pain in his eyes

Notes of the case from this date onwards to June 25th give evidence of continued improvement The patient still misnamed things, but in some instances after a time he would recall the proper name as if there were slow cerebration He was able to get up and to walk about On the 26th he played a game of dominoes When asked to play he said that he did not know what it was, but when once he began he seemed to pick up the game very readily and he played correctly This note is interesting, as indicating that the centres necessary for making the moves—visual—and the tracts connecting these with the motor, and the motor centres themselves were not involved in the disease, being placed higher than the parts destroyed by the abscess It is also interesting that he read and understood the newspapers, as it indicates that not only the centres immediately concerned in this act but also the special word hearing centre was not involved, as a patient cannot read with understanding when this centre is destroyed On the 28th he went out and continued improvement was noted on the next day (June 29th) When shown a pencil he said "Always forget the name of that" and when asked what it was for he explained by signs and said that it was "for writing' A safety pin was shown to him and he said, "I don't mind the name yet" He said it was for "catching anything," making a sign with his sleeve He could not name a box of matches, but said it was for "lighting pipe" He could read the words "paraffin matches" on the box When shown a match after reading the name on the box he could not name it, and when asked if it was a match he said, "I don't think so" The last note is curious as it would mean the existence of some word deafness or auditory aphasia, but, as Dr William Elder who saw the patient suggested, as he had paraphasia the answer "I don't think so" may not have been what he intended to say Though he could read the words "paraffin matches" he evidently did not understand what they signified The former answers indicate no word deafness at all It is quite possible that had he been shown the words "pencil" and "safety pin" he would not have been able to connect them with the objects which they denote

So far the case indicates clinically a lesion affecting the conducting fibres from the auditory centre to Broca's convolution At times the history is difficult to understand, as some symptoms—the gibberish, &c —seem to indicate word deafness and shortly after others would indicate that this did not exist From this date onwards the patient grew worse On July 4th the hernia cerebri was much smaller, nearly flush with the surface, and the discharge was slight, elastic pressure was applied pretty firmly In the evening he began to complain

TABLE I —*The Incubation of Scarlet Fever*

No. of case.	Sex.	Age.	Sore-throat.	Rash	Isolated	Residence.	Possible source of infection	No of days in incubating
21	M.	16	Nov 7 1831	Nov 8 1831	Nov 8, 1831	Mr W	?	—
22		16	Nov 14 1831	Nov 16, 1831	Nov 16, 1831	"	No. 21	6
23	"	—	Feb. 1, 1835	Feb. 2, 1835	Feb. 1, 1835	Mr M.	?	—
24	"	—	Feb 3, 1835	Feb. 4 1835	Feb. 4 1835	"	No. 23	2

Remarks—Case 22 was a great friend of Case 21. Case 24 slept next to Case 23 in the same dormitory

TABLE II —*The Incubation of Chicken pox*

No. of case.	Sex.	Date	Residence.	Possible source of infection.	No of days incubating.
24	Male	March 2, 1835	Mr L. W	?	—
25		3,	"	?	—
26		18,	Mr H.	Case 24	16
27		19 "	Mr L. W	Case 24 or Case 25	16 or 17
28	Female	Feb. 20, 1835	Mr S	—	—
29	"	March 7 "	"	Case 28	17
30		9		"	19
31	Male	12,	"	?	—
32		" 31,		Case 31	19
33		May 15,	Mr W	?	—
34		" 28 "	Mr S	Case 33	13
35	"	Feb 27 1889	"	?	—
36		March 14	"	Case 35	15
37		31,	Mr M.	—	—
38	"	April 18,	Home	Case 37	18
39		18,	Mr M.		18
40	"	Nov 29		?	—
41	"	Dec. 8, "		Case 40	9
42		Oct. 17 1890	Mr Mce.	?	—
43		" 19, "	Mr O.	?	—
44	"	23	Mr D	?	—
45	"	Nov 1,	Mr P	Case 43	13
46		" 2,	Mr Mce.	Case 42	16
47		5 "	Mr M.		19
48		—	Mr P	Case 44	13
49		Nov 4 1890	Mr B T.	?	—
50		19		Case 49	15
51		18,	Mr Mce.	?	—
52		Dec. 5 "		Case 51	17
53	"	May 16, 1894		—	15
54	"	June 2,		Case 53	15
55	"	Nov 5, 1895	Mr B	?	—
56		22, "		Case 55	17
57		Dec. 7 "		Case 56	15
58	"	June 23, 1895	Mr S	?	—
59		July 14		Case 53	16

Remarks.—Case 26 was in the same form as Case 27. Cases 29, 29 and 30 were three sisters—the eldest fell ill first and then the youngest. Case 32 was in the study of Case 31 on March 12th. Case 33 fell ill on the first day of term (May 15th) Case 34 was in the same form as Case 33 on May 15th before he was isolated. Case 36 was in the sick room on Feb. 27th visiting his brother before he was isolated. Case 37 visited home for a few hours on March 31st and was isolated later in the same day Case 38 saw Case 37 on March 31st during this visit and fell ill at Hampstead. Case 39 was in the same house as Case 38. Fell ill in Brittany Case 40 was covered with spots on Nov 29th, 1889 which had been evidently present for a day or two before isolation and probably for several days more A very questionable case. Case 45 was in the same form as Case 43 Case 46 was great friends with Case 42. Case 47 was in the same form as Case 42. Case 48 was in the same form as Case 44 Case 50 slept in the same dormitory as Case 49 Case 52 slept in the same dormitory as Case 51. Case 53 travelled to school from Eastbourne. As there was no illness at home the disease was probably caught in the railway carriage. Case 54 slept in the same dormitory as Case 53. Case 56 slept in the same dormitory as Case 55. Case 57 was a study companion of Case 56 Case 59 slept next to Case 53.

TABLE III —*Chicken-pox and Measles Concurrent*

No. of case.	Sex.	Age.	Residence.	Chicken pox.	Measles.
1	Male	?	Home	Feb. 14 1889	March 21, 1889

TABLE IV —*The Incubation of Mumps*

No of case.	Sex.	Date.	Residence.	Possible source of infection	No. of days incubating.	Side first affected.
58	Male	Nov 17 1884	Mr S	?	—	Left
59		Dec. 2,	"	Case 58	15	Both
60		7 "			19	Right
61	"	" 7			19	"
62		7	"	"	19	"
63		" 7			19	Left
64		8,			20	Right
65		March 9 1885		?	—	"
66		30	Mr D	Case 65	21	"
67		31,	Mr Mce		22	Left
68		Feb 2 1888	Mr B. T	?	—	Right
69	"	19	"	Case 68	17	"
70		19 "			17	"
71		19,			17	"
72		22, "			20	"
73		24 "		?	—	—
74		March 8,		Case 69	17	Right
75		8	Mr P	Case 73	13	"
76		10,	Mr S		17	Left
77		" 13	Mr B. T.		20	"
78	"	" 13, "	Mr M.		20	"
79	"	14, "	Mr P		21	Both
80		14 "	"	"	21	"
81		14	Mr M.		21	"
82		14		"	21	"
83		July 3, 1891	Mr D	?	—	—
84	"	22,	"	Case 83	19	—
85	"	May 17 1892	Mr C	Home	19	Right
86	"	June 2,		Case 85	18	Left
87	"	20, "	Mr S	Case 86	18	"
88	"	21,	Mr D	"	19	"
89		30 1896	Mr C	?	—	"
90		July 19		Case 89	19	Both

Remarks—Case 59 had orchitis on Dec. 9th, 1884 Case 60 slept next to Case 58 in dormitory Case 61 worked in the same study as Case 58. Case 62 went into the sick room where Case 58 was isolated on Nov 18th, just before the latter was removed to the sanatorium. Case 63 was intimate with Case 58. Case 64 was visited constantly in his study by Case 58. Case 66 was in the same French set as Case 65. Case 67 sat immediately behind Case 65 in chapel Case 69 was in the same form as Case 68 and sat next but one to him at meals. Case 70 slept in the same dormitory as Case 68. Case 72 sat at the same table at meals as Case 68. Case 74 slept in the next bed to Case 69. Cases 75 and 76 were in the same form as Case 73. Case 77 was working with Case 73 on the day before he was isolated (Feb. 23rd). Case 78 was in the same mathematical set as Case 73. Cases 79, 80, 81, and 82 were in the same form as Case 73. Case 83 went home from school to his father's funeral and on July 3rd slept with a brother who the next day showed symptoms of mumps. He was quarantined on returning to school (from July 16th) and on July 22nd showed mumps. Case 85—The school assembled on April 29th. There had been mumps at home, and he was sent right away but on his way to school went home to say good bye. Case 86 sat next but one to Case 85 at dinner Case 88 was in the same form as Case 86. Cases 89 and 90 were the only two cases which occurred in 1896

I would again call attention to the orchitis of mumps and emphasise the facts that it is not a metastasis, that it almost invariably occurs on the seventh or the eighth day, and that it never arises (unless the mumps begin with it) if the patient be kept in bed over the eighth day

RUBELLA OR ROSERASH

In 1896 the committee appointed for the consideration o the Nomenclature of Diseases wisely removed the names of 'rubeola' and 'rötheln" and substituted that of

the part where normally is a hollow to receive the upper surface of the cerebellum This swelling was due to extravasation of blood into the brain substance On horizontal section an abscess containing thick green pus was opened into in the position of the left lateral ventricle The surface was congested, rough, and breaking down The right lateral ventricle contained a small amount of non purulent fluid After hardening in formalin transverse coronal sections were made and tracings were taken The left temporal lobe contained an old abscess cavity in its anterior two-thirds, tailing off into the second and third convolutions posteriorly (Fig 1) Its contents were inspissated and white The grey matter was thinned over it The second (anterior) operation wound just stopped short of another recent abscess containing green pus This was most extensive opposite the posterior part of the island of Reil. (Fig 2) On section it was found to be in the position of the external capsule and was invading both externally and internally, chiefly the latter, towards the lenticular nucleus From this abscess a series of smaller abscesses extended backwards and downwards towards the base of the hernia, some reaching it Internally and below, corresponding to the superficial swelling already noted, the lobe for about one inch in depth was infiltrated with blood The hernia examined microscopically was found to be composed of breaking down tissue infiltrated with pus, and into it by appropriate staining a few nerve fibres could be traced The course of events had been (1) middle ear disease extending into the antrum and affecting the facial nerve, (2) extension by the superior semicircular canal to the surface of the petrous bone and thence to the dura mater and cerebrum, (3) the formation of a primary abscess in the temporal lobe, (4) a hernia cerebri, and (5) secondary abscesses in the external capsule and extending thence chiefly into the lenticular nucleus and backwards towards the base of the hernia. These abscesses, with surrounding tumefaction and œdema both general and in relation to the basal ganglia, accounted for the later compression symptoms

Thus we have the illness commencing with middle ear suppuration and probable direct extension to the temporal lobe in which the subsequent abscess formation affected the whole lobe with the exception of the word hearing centre which was not affected at any stage The abscess theoretically had interfered with fibres passing from below the word hearing centre under the island of Reil to Broca's convolution, but was not at all in the line of those passing from the auditory centre proper to that motor speech area The secondary abscesses were certainly in a situation which would interrupt these connecting fibres, but from the clinical aspects of the case we were disposed to connect them almost wholly with the more generalised symptoms of compression which went on to death and which latterly veiled other localising symptoms Probably, therefore, these secondary abscesses may be left out of account in explaining the aphasic symptoms

The fact that the symptoms of aphasia and paraphasia were observed only after evacuation of the first abscess may be explained by the insensibility which existed for some time before the operation and which masked a condition which only became evident when the causes of the coma were removed After all, therefore, we may confine our consideration of the case to the primary abscess in the temporal lobe and see how the clinical aspects of the case are borne out by the pathological findings

We have, then, an abscess involving the whole white matter of the temporal lobe with the exception of the auditory—word hearing—centre The aphasic symptoms noted were chiefly the paraphasia of which the patient was in most cases conscious and amnesia particularly of nouns and names, while even in this it was noticed that the patient was able to name at times certain common objects In connexion with these articulative amnesia was noticed, parts of a word being given—e g, 'ence for "pencil," "wrying" for "writing," and so on With less familiar objects the patient was almost completely anmesic though he could often denote by a sentence in the verbal form or assisted by gestures their use The escape of the word hearing centre explains his consciousness of the mistakes which he made, but the difficulty now is to explain his amnesia of nouns The naming mechanism was at fault The case seems to indicate that the area which controls this mechanism need not necessarily be identical with the auditory centre, but that there may be another part of the cortex in which memories of names are stored No such centre has hitherto been described, though Elder in his book on Aphasia makes a suggestion which this case seems to support to a considerable extent He says: "If, therefore, there is a naming mechanism separate from the auditory word-centre, then the clinical and pathological evidence point to an important part of that mechanism being situated in the near neighbourhood of the auditory word-centre, but probably lower down—viz, in the posterior half of the third and second temporo-sphenoidal convolutions' (p 136) "Amnesia verbalis, and especially the form where there is amnesia of nouns, such as proper names and concrete nouns, may occur without there being any word deafness or motor aphasia" "Lesion in the temporo-sphenoidal lobe, especially if towards the posterior part of the lobe, produces amnesia verbalis, if in the second and third temporo-sphenoidal convolutions amnesia verbalis occurs without word deafness, but if the first temporo-sphenoidal is also involved the patient is word deaf" "These facts tend to show that an important part of the mechanism concerned in the recalling of words and names is situated in the temporo-sphenoidal lobe towards the posterior part of the lobe and that this part of the mechanism is very closely associated and probably continuous with the word hearing centre although not identical with it" (p. 139) "In connexion with auditory aphasia it is necessary to remember also that amnesia of nouns may be a marked symptom and in that case the naming mechanism is involved, an important part of which, as I have shown, is in all probability a little lower down than the auditory word-centre—viz, in the second and third temporo-sphenoidal convolutions. If the patient showed difficulty in recalling names or in naming objects at sight without having word-deafness the lesion would probably be found to be at a lower level in the temporal lobe than the first temporal, and if the patient showed a marked difficulty in naming objects at sight probably the lesion would be subcortical or deep in the substance of the posterior part of the temporal lobe" (p 251)

Now, admitting the existence of such an area, the conducting fibres from it to Broca's convolution would be interrupted and the results would be such as were found in this case Certainly all depends upon the elimination of the other factors present and we think that they may be eliminated on very reasonable grounds as already detailed

Edinburgh.

THE INCUBATION PERIOD OF SCARLET FEVER, VARICELLA, PAROTITIS, AND RÓTHELN

BY CLEMENT DUKES, M D, M R C P LOND,
PHYSICIAN TO RUGBY SCHOOL AND SENIOR PHYSICIAN TO THE HOSPITAL OF ST CROSS, RUGBY

UNDER the above title there has already appeared in THE LANCET[1] a paper by me giving an account of the periods of incubation from April 1871, to April, 1881, of some of the infectious illnesses incidental to boys I now propose to add a further series of cases, thus giving altogether a continuous record from April, 1871, to April, 1899—a period of 28 years—being an analysis of bedside notes taken by myself That out of the many hundreds of which I have notes I am able to furnish so few cases arises from the fact that amongst a large number of adolescents in intimate association with one another these ailments usually and rapidly become epidemic, and as soon as this occurs no reliable records can be obtained Their value consists in the fact that the moment there is even a suspicion of infection the patient is placed in strict quarantine in the school sanatorium and there is therefore no further possibility of his continuing to infect others This value is, however, somewhat diminished in this respect, that while one boy will declare himself ill on the occurrence of the slightest indisposition, another "thinks it is nothing and will not surrender until compelled by his feeling ill or by the outward and visible signs manifest to his schoolfellows Thus for some hours he may continue to infect others There is therefore a small fallacy which must be allowed for, but the facts are as accurate as can be gathered from cases of patients in that period of life when such carelessness is a not unheard of quality

[1] THE LANCET Oct 29th, 1881, p. 743.

TABLE I.—*The Incubation of Scarlet Fever*

No. of case.	Sex	Age.	Sore-throat.	Rash	Isolation	Residence.	Possible source of infection	No. of days incubating
21	M.	16	Nov. 7 1881	Nov. 8, 1881	Nov. 8, 1881	Mr. W	?	—
22		16	Nov. 14 1881	Nov. 16, 1881	Nov. 16, 1881	"	No. 21	6
23	"	—	Feb. 1, 1885	Feb. 2, 1885	Feb. 1, 1885	Mr. M.	?	—
24	"	—	Feb. 3, 1885	Feb. 4 1885	Feb. 4 1885	"	No. 23	2

Remarks.—Case 22 was a great friend of Case 21. Case 24 slept next to Case 23 in the same dormitory

TABLE II.—*The Incubation of Chicken-pox*

No. of case.	Sex	Date	Residence.	Possible source of infection.	No. of days incubating
24	Male	March 2, 1883	Mr. L. W	?	—
25		3,	"	?	—
26		18,	Mr. H.	Case 24	16
27		" 19 "	Mr. L. W	Case 24 or Case 25	16 or 17
28	Female	Feb. 20, 1886	Mr. S	—	—
29	"	March 7 "	"	Case 28	17
30		9,			19
31	Male	12,	"	?	—
32		31,		Case 31	19
33		May 15, "	Mr. W	?	—
34		" 28 "	Mr. S	Case 33	13
35	"	Feb. 27 1889	"	?	—
36		March 14	"	Case 35	15
37		31	Mr. M.	—	—
38		April 18,	Home	Case 37	18
39		18,	Mr. M.	"	18
40	"	Nov. 29		?	—
41	"	Dec. 8,		Case 40	9
42	"	Oct. 17 1890	Mr. Mce.	?	—
43		" 19	Mr. C.	?	—
44	"	23	Mr. D	?	—
45	"	Nov. 1,	Mr. P	Case 43	13
46		" 2,	Mr. Mce.	Case 42	16
47		" 5 "	Mr. M.		19
48		—	Mr. P	Case 44	13
49		Nov. 4 1890	Mr. B. T.	?	—
50		19		Case 49	15
51		18,	Mr. Mce.	?	—
52		Dec. 5, "		Case 51	17
53		May 18, 1894		—	15
54		June 2,		Case 53	15
55		Nov. 5, 1895	Mr. B	?	—
56		22		Case 55	17
57		Dec. 7 "		Case 56	15
58	"	June 23, 1895	Mr. S	?	—
59		July 14		Case 58	16

Remarks.—Case 26 was in the same form as Case 24. Cases 28, 29 and 30 were three sisters—the eldest fell ill first and then the youngest. Case 32 was in the study of Case 31 on March 12th. Case 35 fell ill on the first day of term (May 15th). Case 34 was in the same form as Case 33 on May 15th before he was isolated. Case 36 was in the sick room on Feb. 27th visiting his brother before isolation. Case 37 visited home for a few hours on March 31st and was isolated later in the same day. Case 38 saw Case 37 on March 31st during this visit and fell ill at Hampstead. Case 39 was in the same house as Case 38. Fell ill in Brittany. Case 40 was covered with spots on Nov. 29th, 1889, which had been evidently present for a day or two before isolation and probably for several days more. A very questionable case. Case 45 was in the same form as Case 43. Case 46 was great friends with Case 42. Case 47 was in the same form as Case 42. Case 48 was in the same form as Case 44. Case 50 slept in the same dormitory as Case 49. Case 52 slept in the same dormitory as Case 51. Case 53 travelled to school from Eastbourne. As there was no illness at home the disease was probably caught in the railway carriage. Case 54 slept in the same dormitory as Case 53. Case 56 slept in the same dormitory as Case 55. Case 57 was a study companion of Case 56. Case 59 slept next to Case 58.

TABLE III.—*Chicken-pox and Measles Concurrent*

No. of case.	Sex.	Age.	Residence.	Chicken pox.	Measles.
1	Male	?	Home	Feb. 14 1889	March 21, 1889

TABLE IV.—*The Incubation of Mumps*

No. of case.	Sex.	Date.	Residence	Possible source of infection	No. of days incubating	Side first affected.
58	Male	Nov. 17 1884	Mr. S.	?	—	Left
59		Dec. 2,	"	Case 58	15	Both
60		7 "			19	Right
61	"	7			19	"
62		7	"	"	19	"
63		" 7	"		19	Left
64		8,			20	Right
65		March 9 1885		?	—	"
66		30	Mr. D	Case 65	21	"
67		31,	Mr. Mce		22	Left
68		Feb. 2, 1888	Mr. B. T	?	—	Right
69	"	19	"	Case 68	17	"
70		19			17	"
71		19, "			17	"
72		22, "			20	"
73	"	24 "		?	—	—
74		March 8,		Case 69	17	Right
75		8	Mr. P	Case 73	13	"
76		10,	Mr. S		17	Left
77		13,	Mr. B. T		20	"
78	"	13, "	Mr. M.		20	
79	"	14 "	Mr. P		21	Both
80		14 "	"	"	21	"
81		14	Mr. M.		21	"
82		14	"	"	21	"
83		July 3, 1891	Mr. D	?	—	—
84		22,	"	Case 83	19	—
85	"	May 17 1892	Mr. C	Home	19	Right
86	"	June 2,		Case 85	18	Left
87	"	20	Mr. S	Case 85	18	"
88	"	21,	Mr. D		19	
89		30 1896	Mr. C	?	—	"
90		July 19		Case 89	19	Both

Remarks.—Case 59 had orchitis on Dec. 9th, 1884. Case 60 slept next to Case 58 in dormitory. Case 61 worked in the same study as Case 58. Case 62 went into the sick room where Case 58 was isolated on Nov. 18th, just before the latter was removed to the sanatorium. Case 63 was intimate with Case 58. Case 64 was visited constantly in his study by Case 58. Case 66 was in the same French set as Case 65. Case 67 sat immediately behind Case 65 in chapel. Case 69 was in the same form as Case 68 and sat next but one to him at meals. Case 70 slept in the same dormitory as Case 68. Case 72 sat at the same table at meals as Case 68. Case 74 slept in the next bed to Case 69. Cases 75 and 76 were in the same form as Case 73. Case 77 was working with Case 73 on the day before he was isolated (Feb. 23rd). Case 78 was in the same mathematical set as Case 73. Cases 79, 80, 81, and 82 were in the same form as Case 73. Case 83 went home from school to his father's funeral and on July 3rd slept with a brother who the next day showed symptoms of mumps. He was quarantined on returning to school (from July 16th) and on July 22nd showed mumps. Case 85.—The school assembled on April 29th. There had been mumps at home, and he was sent right away but on his way to school went home to say good bye. Case 86 sat next but one to Case 85 at dinner. Case 88 was in the same form as Case 86. Cases 89 and 90 were the only two cases which occurred in 1896.

I would again call attention to the orchitis of mumps an[illegible] emphasise the facts that it is not a metastasis, th[illegible] almost invariably occurs on the seventh or the eighth [illegible] and that it never arises (unless the mumps begin wi[illegible] the patient be kept in bed over the eighth day.

RUBELLA OR ROSERASH

In 1896 the committee appointed for th[illegible]tion o[illegible] the Nomenclature of Diseases wisely [illegible] names [illegible] that of [illegible] of 'rubeola' and 'rötheln" an[illegible]

the part where normally is a hollow to receive the upper surface of the cerebellum This swelling was due to extravasation of blood into the brain substance On horizontal section an abscess containing thick green pus was opened into in the position of the left lateral ventricle The surface was congested, rough, and breaking down The right lateral ventricle contained a small amount of non purulent fluid After hardening in formalin transverse coronal sections were made and tracings were taken The left temporal lobe contained an old abscess cavity in its anterior two-thirds, tailing off into the second and third convolutions posteriorly (Fig 1) Its contents were inspissated and white The grey matter was thinned over it The second (anterior) operation wound just stopped short of another recent abscess containing green pus This was most extensive opposite the posterior part of the island of Reil (Fig 2) On section it was found to be in the position of the external capsule and was invading both externally and internally, chiefly the latter, towards the lenticular nucleus From this abscess a series of smaller abscesses extended backwards and downwards towards the base of the hernia, some reaching it Internally and below, corresponding to the superficial swelling already noted, the lobe for about one inch in depth was infiltrated with blood The hernia examined microscopically was found to be composed of breaking down tissue infiltrated with pus, and into it by appropriate staining a few nerve fibres could be traced The course of events had been (1) middle ear disease extending into the antrum and affecting the facial nerve, (2) extension by the superior semicircular canal to the surface of the petrous bone and thence to the dura mater and cerebrum, (3) the formation of a primary abscess in the temporal lobe, (4) a hernia cerebri, and (5) secondary abscesses in the external capsule and extending thence chiefly into the lenticular nucleus and backwards towards the base of the hernia. These abscesses, with surrounding tumefaction and œdema both general and in relation to the basal ganglia, accounted for the later compression symptoms

Thus we have the illness commencing with middle ear suppuration and probable direct extension to the temporal lobe in which the subsequent abscess formation affected the whole lobe with the exception of the word hearing centre which was not affected at any stage The abscess theoretically had interfered with fibres passing from below the word hearing centre under the island of Reil to Broca's convolution, but was not at all in the line of those passing from the auditory centre proper to that motor speech area The secondary abscesses were certainly in a situation which would interrupt these connecting fibres, but from the clinical aspects of the case we were disposed to connect them almost wholly with the more generalised symptoms of compression which went on to death and which latterly veiled other localising symptoms Probably, therefore, these secondary abscesses may be left out of account in explaining the aphasic symptoms

The fact that the symptoms of aphasia and paraphasia were observed only after evacuation of the first abscess may be explained by the insensibility which existed for some time before the operation and which masked a condition which only became evident when the causes of the coma were removed After all, therefore, we may confine our consideration of the case to the primary abscess in the temporal lobe and see how the clinical aspects of the case are borne out by the pathological findings

We have, then, an abscess involving the whole white matter of the temporal lobe with the exception of the auditory—word hearing—centre The aphasic symptoms noted were chiefly the paraphasia of which the patient was in most cases conscious and amnesia particularly of nouns and names, while even in this it was noticed that the patient was able to name at times certain common objects In connexion with these articulative amnesia was noticed, parts of a word being given—e g "ence" for "pencil," "wrying" for "writing," and so on With less familiar objects the patient was almost completely amnesic though he could often denote by a sentence in the verbal form or assisted by gestures their use. The escape of the word hearing centre explains his consciousness of the mistakes which he made, but the difficulty now is to explain his amnesia of nouns The naming mechanism was at fault The case seems to indicate that the area which controls this mechanism need not necessarily be identical with the auditory centre, but that there may be another part of the cortex in which memories of names are stored No such centre has hitherto been described, though Elder in his book on Aphasia makes a suggestion which this case seems to support to a considerable extent He says "If, therefore, there is a naming mechanism separate from the auditory word centre then the clinical and pathological evidence point to an important part of that mechanism being situated in the near neighbourhood of the auditory word-centre, but probably lower down—viz, in the posterior half of the third and second temporo-sphenoidal convolutions" (p 136) "Amnesia verbalis, and especially the form where there is amnesia of nouns, such as proper names and concrete nouns, may occur without there being any word deafness or motor aphasia" "Lesion in the temporo-sphenoidal lobe, especially if towards the posterior part of the lobe, produces amnesia verbalis, if in the second and third temporo-sphenoidal convolutions amnesia verbalis occurs without word deafness, but if the first temporo-sphenoidal is also involved the patient is word deaf" "These facts tend to show that an important part of the mechanism concerned in the recalling of words and names is situated in the temporo sphenoidal lobe towards the posterior part of the lobe and that this part of the mechanism is very closely associated and probably continuous with the word hearing centre although not identical with it" (p 139) "In connexion with auditory aphasia it is necessary to remember also that amnesia of nouns may be a marked symptom and in that case the naming mechanism is involved an important part of which, as I have shown, is in all probability a little lower down than the auditory word-centre—viz, in the second and third temporo-sphenoidal convolutions If the patient showed difficulty in recalling names or in naming objects at sight without having word-deafness the lesion would probably be found to be at a lower level in the temporal lobe than the first temporal, and if the patient showed a marked difficulty in naming objects at sight probably the lesion would be subcortical or deep in the substance of the posterior part of the temporal lobe" (p 251)

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[1] THE LANCET, Oct 29th, 1881, p 743.

in the early stage It is therefore clear
tious diseases which have been arrested the
of times are the most infectious at the onset
that roserash bears the palm

	icken pox. No. of cases.
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	2
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	1
	2
	2
	—
	—
	—
	—
	—
	—
Number of epidemics prevented	11

CASE OF TOXÆMIA WITH CONVULSIONS

C L FRASER F R C P, F R C S EDIN,
SURGEON TO THE BERWICK INFIRMARY

OUNG man, aged 34 years consulted me on Oct 26th, regarding a peculiar numb sensation which he had rienced on the previous day in his left hand and arm on the left side of the face and head He was apparently ng and healthy, florid as he had always been from lead an active outdoor life, did not feel weak and was free om headache, sickness, or any other symptom The urine ontained neither albumin nor sugar, nor any trace of acetone The urea was also normal in quantity The only other observable symptom was that the first sound of the heart was subdued and muffled He had been working hard for some months both mentally and physically The family history presented only the interesting fact of hereditary gout The patient had no syphilitic history and he lived a very moderate life as regards alcohol I ordered him to the south of England for complete rest and whilst there he had no symptoms of any kind to attract attention He returned home on Dec 4th On the night of the 7th, after a fatiguing day, he was suddenly attacked on going to bed with violent general convulsions, preceded by the same numb sensations in the left leg and arm Three seizures succeeded each other in rapid succession in the course of which the tongue was severely lacerated I saw him immediately after the fits were over and stayed beside him for several days and nights The convulsions were succeeded by violent vomiting which lasted intermittently for two days The tongue was coated very thickly with a deep brown fur and the odour of the breath was so very unpleasant that it was at once observable to anyone entering the sickroom He was dull and stupid for a day or two and had no recollection of anything which had happened The urine now contained albumin, but this was probably due to the congestion caused by the violence of the fits The reflexes of the left leg were exalted, sensation in both legs was equal, the pupils were equal on both sides and sensitive to light There was no optic neuritis The bowels had previously been constipated and owing to the vomiting no medicine could be given by the mouth, but what could be effected by enemas and glycerine injections was done successfully At this stage he was seen by a well known consultant who gave a very guarded opinion suggesting the probability of a cerebral tumour situated in the right fissure of Rolando With such opinion I was loth to concur On the night of the 14th the patient was threatened with another seizure, the twitching in the left leg and the numb feeling in the arm returned He was in violent alarm being quite conscious A quarter of a grain of morphia was at once injected hypodermically and 15 grains of chloral per rectum, which speedily allayed the symptoms Another attack threatened on the 15th which was aborted in the same way On the 16th a more pronounced attack came on, the left leg and arm twitched violently, the patient remaining conscious During these events the tongue was dirty and the breath was as offensive as before, thirst was very great and the idea of eating was quite repugnant. On the 17th he took calomel and rhubarb, of each five grains, which acted very freely, bringing away large and exceedingly dark foul smelling stools The patient expressed himself as feeling easier after that, the vomiting did not return, the thirst was less, and the edges of the tongue began to clear There were no further local symptoms except that he could not well direct the left hand to pick up a small object The bowels were kept very freely opened by pills given at night containing grey powder and compound pill of colocynth followed by draughts of hot mineral water in the morning He still had 10 grains of chloral per rectum at night to ensure sleep which came on regularly The fur was leaving the tongue and the offensive

"rubella", but inasmuch as all our infectious diseases have a vernacular name and are rarely called by their technical names, such as "variola" and "pertussis," but by their common names "small pox" and "whooping cough," so in this disease they very unwisely left the common name, "German measles" standing We have thus two totally distinct diseases, affording no protection against the other, denominated by the generic name "measles" For although one has the specific name "English measles," and the other "German measles," the distinguishing prefix is almost invariably omitted and both diseases go by the common name of "measles" This leads to endless confusion in schools where an endeavour is made to protect large numbers of scholars from these pests, and the oversight frequently occasions the needless isolation of children until it is ascertained beyond doubt which illness they are suffering from, which illness they have had, or which illness they have been exposed to I receive numerous certificates stating that children have measles or that they have had measles or that they have been exposed to measles without any attempt being made to declare which disease is referred to In the middle of last century this ailment—rubella—was known, but it was continually confounded with English measles and with scarlet fever In the middle of the present century it was described in Germany and received the name of "rotheln," which we unfortunately translated into "German measles" In the early "fifties" an epidemic of it occurred at Rugby and was designated by the then medical officer to Rugby School "spring rash"—a most appropriate name, for it never commences at Rugby earlier than in March and dies out in the middle of the summer It was so rife in one year, about 1852, when quarantine regulations were in their infancy, that most of the boys were infected with it and worked and played as usual Dr Richard

TABLE V —*The Incubation of Roserash*

No of case	Sex	Date	Residence	Possible source of infection	No of days incubation
37	Male	Feb. 26, 1882	Mr J B	?	—
38		March 16,		Case 37	16
39	,	17 ,		,	18
40	,,	,, 23, ,		Case 38	12
41	,	April 4,	Mr W	Case 38 or Case 39	16 or 17
42	,,	May 11	Mr H		—
43		, 27		Case 42	16
44		,, 27	Mr L W		16
45		28,	Mr B T		17
46	,	28, ,	Mr H		17
47		June 12,	Mr L W	Case 44	16
48	,	March 4 1887	Mr J B.	,	—
49		,, 19	,	Case 48	15
50	,,	21,	,,		17
51	,,	,, 3 1893	Mr D	?	—
52	,	, 20, ,	Mr C	Case 51	17
53	,,	April 3, ,	,	Case 52	14
54	,,	March 3 1896	Mr S	?	—
55	,,	,, 17	,,	Case 54	14
56	,,	5, ,	Mr M	—	—
57	,,	21,	,,	Case 56	16

Remarks—Case 38 was with Case 37 just before he was isolated Case 39 was in the study of Case 37 with him on Feb 27th Case 40 was intimate with Case 38. Case 41 was in the same form as Cases 38 and 39 Case 43 was in the same dormitory as Case 42. Cases 44 and 45 were in the same form as Case 42. Case 46 was in the same study as Case 42. Case 47 was in the same study as Case 44 Cases 49 and 50 slept in the next bed to Case 48. Cases 52 and 53 were in the same form as Case 51 Case 55 slept next to Case 54 Case 57 shared a study with Case 56

Bright, when visiting his son, who was a pupil in the school, was asked to assign to it a more definite name and he declared it to be scarlet fever for which it was so commonly mistaken. For the last 30 years to my knowledge, during the tenure of my predecessor, Dr Farquharson, M P, which contained disease has been invariably technically called with the by School "epidemic roseola," but the commonly "roserash," which is a most reasonable name in that it accurately describes shortly one of the main features of the disease—viz., the rash

If these two diseases were not designated by synonyms their distinctions would soon be as clearly recognised as those of typhus fever and typhoid fever to the infinite gain of children at school, and they would cease, as is so frequently the case, to be regarded as two attacks of one and the same disease It is to be earnestly hoped that when the committee issue the next edition of their Nosology they will distinguish between these two diseases by such distinctive common names that the public and the profession may readily lay hold of them and thus the present confusion would be avoided

TABLE VI —*The Incubation of Measles (18 Years Only—April 1881, to April, 1899)*

No of case	Sex	Residence	Catarrh	Rash	Isolated.	Possible source of infection	Number of days incubating
1	M	Mr H	24/6/82	28/6/82	28/6/82	?	—
2		,	3/7/82	4/7/82	6/7/82	Case 1	8
3	,,	Mr S	5/7/82	6/7/82	8/7/82	,	11
4		Mr J B	7/7/82	9/7/82	9/7/82	,	12
5		Mr L W	6/7/82	10/7/82	10/7/82	,	13
6		Mr T	18/5/84	21/5/84	21/5/84	?	—
7		,	27/5/84	29/5/84	29/5/84	Case 6	9
8	,	Mr B T	18/5/84	20/5/84	18/5/84	?	—
9	,		27/5/84	30/5/84	27/5/84	Case 8	6
10	,		28/5/84	30/5/84	28/5/84		11
11		Mr S	—	20/1/88	20/1/88	?	—
12	,	Mr B T	—	23/1/88	23/1/88	—	—
13	,,	Mr S	—	2/2/88	2/2/88	Case 11	13
14		Mr B T	—	3/2/88	3/2/88	Case 12	11
15	,	Mr M	—	19/6/90	20/6/90	?	—
16		Mr B T	—	—	3/7/90	Case 15	13
17		Mr W L	—	—	4/7/90	,,	14
18		Mr P	—	1/5/92	1/5/92	?	—
19	,	,	—	13/5/92	13/5/92	Case 18	12 or 13
20	,	Mr B.	22/5/92	25/5/92	22/5/92	Case 19	9
21	,,	Mr S	23/5/92	26/5/92	—	?	—
22		,	—	6/6/92	6/6/92	Case 21	10
23		,	—	17/6/92	17/6/92	Case 22	11
24	,	Home	2/4/94	5/4/94	5/4/94	—	11
25		,	13/4/94	16/4/94	13/4/94	Case 24	11
26		Mr C	1/5/94	19/5/94	15/5/94	—	12
27	,	Mr S	9/5/95	12/5/95	12/5/95	—	—
28		,	20/5/95	26/5/95	21/5/95	Case 27	11 14
29			21/5/95	24/5/95	23/5/95		11
30			17/5/95	23/5/95	22/5/95	,,	8-11
31			22/5/95	26/5/95	23/5/95	,,	11
32		Mr W	28/5/95	1/6/95	1/6/95	Case 28	12
33	,	Mr D	8/6/95	11/6/95	11/6/95	Case 32	11

Remarks—Case 2 was working with Case 1 in his study on the evening of June 26th Cases 3 and 4 were in the same form as Case 1 Case 5 said to me: I caught it from Case 1 who sits just in front of me in form Case 7 slept in the next bed to Case 6. Case 9 shared a study with Case 8. Case 10 was working in the same study as Case 8 on May 17th. Case 11 returned to school on Jan. 19th at 7 P M and was isolated with rash at 2 P M on Jan 20th Case 12 returned to school on Jan. 19th and rash was full out on Jan. 23rd Case 13 was in the same form as Case 11 on the morning of Jan 20. Case 14 shared a study with Case 12. Cases 16 and 17 were in the same mathematical set as Case 15. Case 18 had rash full out on May 1st School reassembled on April 29th. Case 19 was isolated on May 13th, when the rash was out. Case 20 was in the same form as Case 19 Case 22 sat next to Case 21 at dinner The rash was full out on June 6th Case 23 slept in the same dormitory as Case 22 and was in the same form Case 24 saw a schoolfellow at Eton just before starting home on March 22nd and his schoolfellow sickened with measles on March 22nd. Case 25 arrived home from Radley on April 2nd there had not been any measles there Case 26 on May 3rd travelled to school with a friend who on arriving at Wolverhampton sickened with measles. Case 28 slept next to Case 27 from May 9th to May 12th Case 29 sat next to Case 27 from May 9th to in the same form Case 30 slept next to Case 27 from May 9th to May 12th. Case 31 sat next to Case 27 at meals and was in the same form Case 32 was in the same form as Case 23. Case 33 was in the same form as Case 32.

weighed 1205 grammes the right hemisphere 460 grammes, the left hemisphere 443 grammes the cerebellum 143 grammes, and the pons and bulb 20 grammes The cerebro-spinal fluid measured about 12 ounces

CASE 2 —A male, aged 19 years, single, was admitted into the asylum in July, 1897 His history was as follows He was a clerk until two years before his admission and was a sharp, healthy lad Then he began to lose his memory, his arms became shaky and his speech affected. Three months before admission he had some convulsions and became excited and restless No history of syphilis, alcohol, or neuropathic heredity could be obtained. On admission he was found to be excitable and restless and wet and dirty in his habits and generally very demented He was in fair bodily condition His speech was accompanied by a well marked "facial flicker" and there was a mitral murmur On July 17th, 1898 the pupils were equal and contracted The direct light and consensual reactions were absent on both sides The tongue showed both coarse and fine tremors and the speech was profoundly affected in an entirely typical manner He was feeble on his legs, without any characteristic peculiarity of gait The left knee-jerk was absent and the right was diminished There were large intention tremors of both arms He gradually became more demented and often required catheterisation and feeding with the œsophageal tube By October, 1898, he had become so feeble that he was permanently confined to his bed and was quite unable to speak beyond an unintelligible monosyllable He was often noisy and restless and would lie for hours with his head just raised from the pillow and being continually wet and dirty in spite of careful nursing he developed small bed sores Towards the end he became rapidly emaciated. He died on March 15th, 1899, at 2 40 P M A post-mortem examination was made on March 16th at 11 A M The body was found to be emaciated The skull cap was of normal thickness and density the dura mater was thickened, without unusual adhesions, and the vessels at the base were healthy The pia arachnoid was thick and spongy and it showed diffused milky opacity There were general firm pial adhesions and almost the whole of the cortex was torn up and eroded on stripping the membranes The only regions comparatively free were the occipital lobes and the right central convolutions The frontal lobes were small and were pointed in shape and the convolutions generally showed much wasting The cortex was atrophied and congested posteriorly The lateral ventricles were dilated with smooth ependyma The ependyma of the fourth ventricle was finely granular The heart was small and the mitral orifice admitted merely the tip of the little finger The myocardium was pale but of normal consistence Both lungs showed depósits of recent tubercle at the apices of the lobes and were œdematous at their bases The kidneys showed thickening and adherence of the capsules and atrophy and toughness of the cortex, and were both generally pale The encephalon weighed 1170 grammes the right hemisphere 440 grammes the left hemisphere 410 grammes, the cerebellum 130 grammes, and the pons and bulb 10 grammes

CASE 3 —A female aged 23 years a married woman, was admitted into the asylum in June, 1898 The patient had been married for five years and was said to have contracted syphilis after her marriage She had had several miscarriages Two years before her admission she had had a convulsive seizure, her memory began to fail, and she used to do silly things She became progressively worse and 18 months later had another convulsion, followed soon after by two more the last occurring a fortnight before her admission and lasting for an hour and a half The catamenia were latterly regular On admission she was silent and restless and she had practically no memory, she had no idea of time or place and she could scarcely understand the simplest question She was in fair bodily condition Her speech was drawling, indistinct and slurred, with much tremor of the lips especially the upper lip The pupils were equal and moderately contracted the reflexes (direct light and consensual) were almost absent, but the pupils reacted well during accommodation Her gait was feeble and the patellar reflexes were brisk The plantar and epigastric reflexes were absent There were no signs of disease in the thoracic or abdominal organs Mentally she was sometimes noisy excited, and incoherent, this being frequently the case at night At other times she was silent dull and confused and took no notice of her surroundings On July 18th she had a convulsive seizure On August 7th she had two seizures during the night and twitched on the left side of the face and in the left limbs all the following day After this there was great difficulty in swallowing and the temperature was raised On Oct 9th she began to have slight nightly rises of temperature and on the following day there was dulness at the base of the right lung with coarse crepitations She died on Oct 13th at 8 30 P M At the post mortem examination which was made on Oct 14th at 3 P M the body was found to be emaciated The calvarium was thick and dense The dura mater was thickened generally and adherent to the skull cap The vessels at the base were slightly atheromatous The pia mater was thickened in all regions except over the tips of the occipital lobes and was very œdematous Adhesions were general on both sides The convolutions showed marked atrophy, the cortex was thin, and the white substance exhibited sclerosed and prominent vessels The lateral ventricles were dilated and showed coarse granularity of their lining membranes The ependyma of the fourth ventricle was also granular The myocardium was not markedly degenerated There was extensive bronchopneumonia at the base of the right lung The liver was large, congested pale, and fatty The right kidney showed two small abscesses in the cortex and some flakes of lymph in the pelvis, the capsule was very adherent The left capsule was also adherent, the cortex was irregular, and the whole organ was pale The encephalon weighed 1200 grammes and after dissection 1052 grammes, the cerebellum, the pons and the medulla weighed 150 grammes

Remarks —Although general paralysis occurring at the periods of puberty and adolescence is now a well recognised condition I venture to think it must be comparatively rare to have three such cases under observation at one time in the same institution The following points of interest suggest themselves As to the age of the patients in Case 1 definite mental symptoms were first noticed by the friends at the age of 19 years, in Case 2 at the age of 17 years, and in Case 3 at the age of 21 years These ages are somewhat higher than the average (about 14 years) of the cases reported by Dr Clouston Dr J Wiglesworth, Dr A R Turnbull, Dr Charcot, and others In duration the cases lasted respectively four, four, and nearly two and a half years These figures are of course only approximate and they should probably be higher as it is impossible to state accurately when the first symptoms occurred Thus Case 1 and Case 2 lasted longer than the average duration of the adult form According to Dr Wiglesworth this is usually the case in young paralytics As regards sex, if anything, more female cases appear to have been recorded than male, but Dr Mickle thinks that the sexes are about equally affected This is in strong contrast to the sex incidence in the disease as it occurs in adults Dr Wiglesworth remarks that in females menstruation is almost invariably absent. Case 3 was an exception to this rule All of the cases showed early, profound and rapid dementia, and in only one (Case 1) was optimism noticed From the records I have seen this latter condition is distinctly rare in these cases As to motor symptoms and reflexes, there were tremors in the muscles of the face, feeble and tottering gait, and pupillary anomalies and convulsive seizures in all of the cases In both of the male cases violent "intention" tremors of the upper limbs were a prominent feature in the later stages An interesting feature in the pathological appearances was the exceedingly well marked nature of the post-mortem changes All of the classical signs were present and were more pronounced than in ordinary adult cases I might particularly mention the widespread and firm pial adhesions Dr Callcott informs me that this is entirely in accord with his experience of these cases As to the causation of general paralysis occurring in young subjects a larger proportion of cases seems to be associated with a history of syphilis than is the case amongst middle aged patients In not one of these three cases was any characteristic sign of syphilis discovered at the necropsy, but a somewhat doubtful history of infection was obtained in one Although not strictly to the point I cannot help remarking that physicians in many asylums who are accustomed to investigate the causation in large numbers of general paralytics year after year, must find it impossible to accept the opinions of those authorities who connect the disease closely with syphilis and describe the latter as being the leading if not the only, essential factor in its causation From personal knowledge of three asylums in the North where large numbers of general paralytics

odour was diminishing The urine was normal and did not even deposit urates As the tongue cleaned the appetite returned and in pleasing contrast to his former state of apathy the patient began to manifest interest in his surroundings and in private affairs These symptoms progressed with such favour that his restoration to a comparative state of health was rapid On Feb 1st, 1899 the patient who had been out a good many times walking short distances, the left leg dragging a little on those occasions, drove a few miles over a rough country road to visit a neighbour and on his return had another convulsion, preceded by the numb feeling in the leg It did not last long nor was he dazed or stupid after it, his memory was not at all impaired nor was there any loss of strength The tongue was found to be dirty again, and the odour of the breath was objectionable, but not to the same extent as on the first occasion Calomel brought away very dark offensive motions He got up again in a day or two but was much afraid to go downstairs as he had lost confidence in his muscular power He was taking hot mineral water every morning and four grains of calomel every seventh day The patient came downstairs on the 12th and all went well until the 24th, when he had an interview with his father which included reference to business matters He then had a conference with the factor, and finally with a friend Being tired he went early to bed, when the same symptoms began in the leg, spreading up the left side and down the left arm and left side of the head These became convulsed and finally all the muscles of the body were in violent motion, but it is to be noted that on this occasion he did not lose consciousness The eyes were very anxious and staring, but not squinting Suddenly, when the movements seemed most violent, they simultaneously ceased and he exclaimed "Thank God" At this attack the tongue was clean and the bowels were well cleared The pulse kept strong and there was no tendency to vomiting From the first feeling in the foot to the end of this attack the nurse judged to be about 10 minutes He slept well afterwards and had no headache After this he was put on 20 grains of bromide of ammonium thrice daily On March 9th he was found to have kept very well and on this date he left home for an extended rest and change of scene

In order to throw some probable light on the case let me cite in a few words the leading points of a previous illness Five years ago the same patient consulted me, the prominent symptoms then being headache, constipation, furred tongue, and irritability of the skin, with patches of eczema (As mentioned above he inherits a gouty diathesis) This was preceded, as was the late illness, by occasional turns of ill temper During the subsequent course of medicine the symptoms cleared and all went well until a patch of skin on the chin suddenly became inflamed This was succeeded by others on the chin and neck, which threw out crop after crop of pustules, which lasted for a fortnight, on the subsidence of which he speedily recovered A course of water at Nauheim benefited him greatly

In closely examining such cases one is struck by the similarity of the course of events to that occurring in uræmia, epilepsy, and cerebral tumour In regard to the first named it is to be noted that the kidneys were perfectly healthy and secreting a normal quantity of normal urine With diseased kidneys one is of course not surprised to encounter any of the numerous phenomena usually met with in so-called uræmia, but it must be observed that the same class of symptoms may be met with while we are dealing with perfectly sound kidneys Whatever part urea may play in the production of the clinical symptoms it is hard to explain how it can produce such a wide and varied train of events I do not purpose to discuss the mechanical and chemical theories at present before us but simply to quote my case in support of the latter That the exciting cause of the two illnesses of my patient was a toxin or toxins absorbed from the liver or intestines I do not doubt I am of opinion that in the one instance the skin was selected as the channel of elimination, and in the other a similar poison produced an irritant discharging effect on the motor cortical cells in the region of the right fissure of Rolando What these poisons are is not known, although several theories exist In this relation the following remarks by Dr Saundby assist one to some extent He says, "We are not in a position at present to explain precisely the pathogenesis of so-called uræmia It is plain that the clinical phenomena vary and that there are many poisons to which these symptoms may be due" "If we are to get a nearer knowledge of these problems it must be by differentiating the clinical types and by recognising the probability that different agencies may be at work in each" Dr Bradford in writing on Uræmia in Allbutt's "System of Medicine," says "Modern knowledge, however, certainly shows that a poison circulating in the general blood stream may pick out but one portion of the nervous system or even produce a lesion on one side of the body only" There was no optic neuritis to support the idea of a tumour being the cause of the symptoms On March 10th I saw the patient with Sir William Gowers After an exhaustive examination he also was of opinion that there was no tumour, that probably the nerve-cells were weakened by the first illness, and that the toxin circulating in such impure blood determined the convulsive seizures in the later illness

Berwick upon Tweed.

THREE CASES OF JUVENILE GENERAL PARALYSIS

BY DAVID HUNTER, M A, M B, B C CANTAB
SENIOR ASSISTANT MEDICAL OFFICER TO THE NEWCASTLE-ON TYNE CITY ASYLUM

THE following cases of juvenile general paralysis have all ended fatally at the Newcastle-on Tyne City Asylum within eight months

CASE 1—A young man, aged 22 years, single, was admitted into the asylum in February, 1898 He had always been strictly temperate and had been considered to be a sharp, clever boy, but was never strong Five years before his admission he was an eye-witness of his father's accidental death and he was very considerably affected by the shock The first definite mental symptoms were noticed three years before his admission, when he became stupid, dull, and lazy Two years later he became shaky and tremulous His sister and his father's uncle were insane No history of syphilis could be obtained On admission he was found to be considerably demented and he could only with difficulty comprehend the simplest question and his memory was almost a blank Physically he was well formed and nourished His speech was slow, hesitating, and slurred, with much twitching of the lower facial muscles His tongue was protruded with difficulty and was very tremulous The pupils were unequal, irregular, eccentric, and they reacted sluggishly consensually and to direct light His gait was feeble and unsteady Mentally he varied much from day to day At times he was childish, happy, and emotional, and he would talk in an exalted manner of his new clothes and his high wages On other occasions he was dull, heavy, and unresponsive The dementia gradually became more profound He always remained stout and took his food well The knee-jerks became greatly exaggerated and all the paretic symptoms intensified On Sept 27th he had a paralytic seizure, from which he quickly recovered On Oct 3rd he had three right-sided convulsive seizures After the third seizure continuous twitching commenced on the left side of the face and in the left limbs, continuing all night in spite of treatment, and on the following morning extending to the other side During the next three days he had many severe general convulsions and in the intervals twitchings of the right side of the face, the right arm, and the leg He died on Oct 8th at 9 10 P M A post-mortem examination was made on Oct 10th at 11 A M The body was found to be well nourished The skull cap was thick, hard, and dense The dura mater was considerably thickened, stiff, and opaque without abnormal adhesions either to the calvarium or the lepto meninges The basal vessels were healthy The pia arachnoid was thickened, spongy and milky, with dilated vessels and excess of fluid in its meshes Adhesions were universal over both hemispheres with the exception of the occipital poles The choroid plexuses were cystic Seen from the surface the convolutions were wasted, especially in the pre frontal regions The cortex was extremely atrophied and soft and the lateral ventricles were dilated The ependyma both of the lateral and fourth ventricles was coarsely granular The heart was small and flabby with no valvular abnormalities and the myocardium was of normal colour and not unduly friable There was extensive broncho-pneumonia of the basal lobe of the right lung The kidneys showed atrophy and fatty changes in the cortex The encephalon

recoveries from even very serious wounds Again, do not be in a hurry to amputate A good surgeon should not only know when to use the knife but also when not to use it. Conservative surgery is the order of the day, but the Services have been slow in following that principle I will quote two cases which well illustrate this The first was that of an European officer who was severely wounded in the upper third of the thigh, with fracture of the femur, the bullet lodging in the gluteal region After consultation with a surgeon in the navy who was kindly lending me his assistance at the time I decided not to amputate and the officer at the present moment has two legs instead of one The second case was that of a native soldier who received a bullet wound of the arm The humerus was fractured in two places and there was extensive laceration of the flesh In this case also I thought it better not to amputate The man is still a member of the Royal Niger Constabulary and is a useful soldier with two arms I could quote many other cases which have come under my notice but the above will suffice I think it will be enough to repeat my warning take time, do not be in a hurry, and all will be well

SUPPURATING CYSTS OF BOTH OVARIES REMOVED BY ABDOMINAL SECTION FIVE WEEKS AFTER AN ABORTION, FOLLOWED BY SEPTIC ABSORPTION, RECOVERY

BY ERNEST A T STEELE, M R C S ENG, L R C P LOND

A WOMAN, aged 33 years, who was seven weeks pregnant, after over exerting herself had a slight hæmorrhage on Dec 30th, 1898 The next day the ovum came away apparently whole and without further loss On Jan 1st, 1899, during the afternoon the patient felt chilly and had a headache and her temperature rose to 102° F , the lochia were a little more profuse than normal but not offensive An intra uterine douche of 1 per cent lysol solution was given in the evening On the 2nd the morning temperature was 101° and the pulse was 96 The patient complained severely of headache and temporofacial neuralgia In the evening as the temperature had risen to 103° the uterus was curetted and many fragments of decidua were removed, after which an intra uterine douche was given On the 3rd the morning temperature was 102 4° and the pulse was 108 She had much headache In the afternoon the cervix was dilated under anæsthesia and the interior of the uterus was thoroughly explored A further quantity of decidual débris was removed from the fundus and anterior wall The uterine wall was then swabbed thoroughly with pure carbolic acid During the examination it was noticed that there were small cystic tumours in the situation of both ovaries The evening temperature was 101° and the pulse was 108 On the 4th the morning temperature was 101 4° and the pulse was 108 She had much headache and some nervous excitement There had been no tenderness but on this day there was considerable gurgling in the right iliac fossa, probably due to the fluid diet However, as there was a possibility of the patient having enteric fever, a specimen of the blood was examined for Widal s reaction with negative results The evening temperature was 100 2° and the patient was more comfortable On the 5th the morning temperature was 101° The headache was better The patient was sick in the night There was tenderness on deep pressure in the right inguinal region On the 6th the morning temperature was 101° and the pulse was 96 There was tenderness on the left side and the patient was much troubled with flatulence which was relieved by a simple enema A vaginal examination revealed tenderness and deposit in the left fornix On the 8th the morning temperature was 103 6° and the pulse was 120 The patient was very restless and thirsty, the lower half of the abdomen was distended and painful, a specially tender spot being over the right ovary, there was also some irritability of the bladder These symptoms were considerably relieved by hot turpentine fomentations and by the evening the temperature had fallen to 100 6° and the abdominal distension had disappeared From this time onward the patient's condition fluctuated from day to day, she had very little pain and her general condition remained good and it was hoped that the inflammatory condition would subside However, by Jan 26th a mass had developed in the right broad ligament depressing the fornix and continuous with an obscurely fluctuating swelling above Poupart's ligament on that side On Feb 2nd the temperature rose to 101 2° and she had another attack of pain and abdominal distension, and during this attack the pulse became weak and irregular for the first time As the patient's condition was evidently getting worse and there was much fear that a rupture of one of the tumours might take place it was decided to operate without further delay Accordingly after due preparation of the patient, &c , I operated on Feb 5th, assisted by Dr Randall and Dr Forsyth, the anæsthetic being administered by Mr Peatson To these gentlemen my best thanks are due for their help The anæsthetic chosen was $A^1C^2E^3$ mixture given in Silk's inhaler

An abdominal incision three inches in length, afterwards enlarged to three and a half inches, revealed a confused and matted condition of the pelvic structures which at first sight appeared inextricable The omentum completely roofed in the pelvis, being firmly adherent to the lower part of the abdominal wall and to the structures which it covered Beginning on the right side the adhesions were separated and the thickened and inflamed omentum was tied off in sections and cut away There was then exposed a universally adherent tumour in the situation of the right ovary A loop of intestine was firmly attached to this tumour and in separating this attachment a small abscess cavity, bounded on the one hand by intestine and on the other by the tumour, was ruptured The pus was at once swabbed up and the enucleation of the tumour was completed The pedicle of the tumour was transfixed and tied with No 2 silk and the tumour was removed It proved to be a dermoid cyst of about three inches in diameter the contents of which were bathed in pus A search was then made for the Fallopian tube on this side but it could not be traced, being buried in the dense inflammatory adhesions The tumour on the left side was then dealt with It was adherent everywhere and on separating its anterior attachments it ruptured and gave exit to a quantity of purulent fluid The rent was clamped and the rest of the cyst was separated until a pedicle was formed, a ligature was then applied as on the opposite side The left Fallopian tube was found and also removed A further search was now made for the right tube but without success The cyst of the left ovary was two inches in diameter The pelvis was washed out with boiled saline solution and carefully dried, the iliac fossæ being also mopped out Owing to the free escape of pus from the tumours and general slight oozing from the torn adhesions it was judged wise to drain The abdominal wound was closed in three layers except where the drainage tube passed and the usual dressings were applied The operation lasted one and a half hours from the beginning of the anæsthetic till the patient was put to bed

The after progress of the case was satisfactory There was very little sickness or pain A little distension of the abdomen on the second and third days was relieved by the rectum tube The discharge was rather free but remained serous throughout not becoming purulent at any time A bacteriological cultivation of it gave numerous colonies of streptococci in chains of 10 or 12 elements and staphylococci The drainage tube was left out finally on Feb 12th, seven days after the operation The catheter was only required for 24 hours The bowels acted with a simple enema five days after, on Feb 10th The patient was allowed up on a couch on Feb 20th and went out in a bath chair on March 2nd, the wound being soundly healed. At the time of writing (April 16th) she is in good health and able to perform her usual duties

This case strongly illustrates the dangers to which small ovarian cysts may give rise should they become infected and suppurate after parturition or miscarriage If these tumours had been discovered before the patient became pregnant and miscarried, in all probability their removal would have been a very simple proceeding instead of the difficult and dangerous undertaking it proved to be when they were matted and bound down by inflammatory adhesions I think that the sequence of events was as follows septic absorption from the uterus and cellulitis of the left broad ligament; infection of the left cyst and an attack of peritonitis on Feb 8th, adhesion of the loop of the bowel to

admitted I can state that histories of syphilis and definite clinical or post mortem signs of that disease are extremely rare Hereditary tendency was present in one case In Case 2 no cause could be assigned

I am indebted to Dr Callcott, the medical superintendent of the asylum, for permission to publish these cases

Newcastle-on Tyne

WOUNDS CAUSED BY SOME PROJECTILES AND THEIR TREATMENT

By EDWARD E CRASTER, L R C P & S EDIN, L F P S GLASG,

PRINCIPAL MEDICAL OFFICER NIGER TERRITORIES WEST AFRICA.

I HAVE in my possession a large number of projectiles of many kinds, varying from the "iron pot" slug to the 0 303 rifle bullet I propose very briefly to describe a few interesting cases of slug and bullet wounds which have come under my notice during four years residence in West Africa

In these regions nearly every variety of warfare is experienced This is largely due to the changes in the character of the country as the traveller passes from the sea up the river Niger into the far interior In the lower river thick bush and forest prevail for some 200 miles, then follows open country covered with stunted trees, while further inland are observed open sandy plains with ranges of hills and huge masses of volcanic rock It can be readily understood from this that the native mode of warfare varies with the character of the country In the delta regions one has to contend with ambuscades at close quarters (from 10 to 20 yards), higher up the country stockaded forts and rifle pits have to be dealt with, and in the open country one is assailed by masses of cavalry assisted by sharpshooters A large proportion of my experience having been in bush fighting my returns show a reversal of the usual conditions of European warfare, wounds of the head, of the neck and of the upper extremities forming a large percentage of the total casualties Surgeon General Longmore's statistics of wounds are well exemplified by the results of the Niger Soudan campaign in which I took part, as the total casualty return gives a large proportion of wounds of the abdomen and lower extremities This campaign was carried out entirely in the open country where we were opposed to large masses of cavalry assisted by "snipers" and the range varied from 200 yards to 1000 yards

CASE 1 *Slug wound of the abdomen* —The slug penetrated the abdomen at an inch to the left side of the umbilicus When I saw the patient part of the omentum was protruding and the man had walked a quarter of a mile holding it up with his hands The protruding tissue was thoroughly washed in a solution of perchloride of mercury and after enlarging the opening I returned the omentum into the abdominal cavity There was no bleeding and after careful exploration I could find no internal injury There was no exit wound, but the slug—a piece of iron hammered into the shape of a bullet—was found under the skin covering the right gluteus muscle Thus the slug had travelled downwards and to the right without inflicting any vital injury There were no complications and the man made a good recovery

CASE 2 *Slug wound of the neck* —When I first saw this most alarm[illegible] finger and thus spurting out from the side of his neck in a [illegible] time calling [illegible]ushion I at once seized the place with my [illegible] bag Almost [illegible]and so stopped the bleeding, at the same [illegible] wounded quite [illegible] my orderly who carried an emergency [illegible]ured artery I [illegible]aneously two soldiers dropped badly [illegible] been steeped in [illegible] me Not having time to find the [illegible] the man into a h[illegible] a compress of blue wool which [illegible]tal the same even[illegible]ompound tincture of benzoin and [illegible] I did not disturb [illegible]ck On seeing this man in the [illegible] treatment was [illegible] there was no sign of hæmor[illegible] until the third day was th[illegible]ssing, in fact, I thought that the wound had quite clos[illegible] non interference, and not discharge, and that there [illegible] interference, and not Within a week the man was di[illegible]ng removed I found that he returned to his duty as a car[illegible] that there had been no a good example of the advantage[illegible] inflammation whatever wounds True, the wound was n[illegible] from the hospital and eighth of an inch in diameter—but [illegible]ink that this case is [illegible]etical sealing of [illegible] was about one-[illegible]plicated by a ruptured artery, possibly the sterno-mastoid branch of the superior thyroid It is now three months since the man was wounded and I have seen him several times He suffers no inconvenience, although he still carries the slug somewhere in his neck

CASE 3 *Bullet wounds (Snider) of the arm, the penis, and the thigh* —This man was shot while taking aim himself One bullet came down vertically, his assailant being in a tree and the other came from the bush on his right The first bullet, travelling vertically, made a deep furrow on the outer side of the left arm from the shoulder to the elbow The other, after passing through the dorsum of the penis, penetrated the inner side of the left thigh and lodged under the skin on the outer side of the thigh four inches below the great trochanter The interest attaching to these wounds lies in the facts that the urethra was intact, that the femoral artery was missed by a hair's breadth, and that the femur was not touched The patient made an uninterrupted recovery and was discharged from the hospital in two months

CASE 4 *Bullet wound (0 303) of the thigh* —This man was an Ilorin He had annoyed us greatly by "sniping" from behind a tree One of our officers silenced him with the Lee-Metford When the fighting was over for the day and we were in camp the man was brought to me On examination I found that he had been shot through the thigh, the bullet entering in front and coming out behind Both the entrance wound and the exit wound were small and clean and I could only discriminate them by the fact that the lips of the exit wound were slightly bulged out After being shot the man had received two severe sword cuts at the back of the neck The cuts were stitched, the bullet wound was dressed and the man was placed in the temporary hospital Next morning, as we could not carry him on, he was sent to a village in the rear During that morning we made the final advance upon Ilorin, carrying on a desultory fight the whole way In the afternoon when in front of the town to my surprise my patient of the day before turned up to have his wounds dressed He had walked the whole of the 10 miles in spite of his severe injuries This forms an excellent example of the small amount of damage which is done by the 0 303 bullet when it is brought into contact with "soft parts," and by far the largest percentage of bullet wounds are in these parts

I had two other cases of 0 303 bullet wounds, one in the left shoulder and one in the jaw The case of the wound in the jaw was interesting The bullet had passed upwards beneath the lower maxillary bone and had penetrated the soft parts between the inner surface of the bone and the tongue It had taken a semicircular piece out of the tip of the tongue and had made its exit at the mouth, taking two of the lower incisors with it The man said that there had been a good deal of hæmorrhage, but there was none when I saw him He came every morning for his wound to be dressed and when we left the town he was on a fair way to recovery I think that the cases which I have cited may fairly be considered to be out of the common and I trust that they will prove to be of some slight interest to the profession, and especially to those whose lot has not called them to endure the *sturm und drang* of the "back of beyond"

My method of dressing wounds is always the simplest possible For first aid on the field the orderlies carry a satchel containing bandages, sal alembroth wool, Leslie's plaster, and bottles containing brandy and potassium permanganate tabloids, the latter mostly for the treatment of wounds from poisoned arrows The after treatment of course depends largely upon the character of the wound, but I always use as my basis the sal alembroth gauze I consider it to be *par excellence* the best dressing for bullet wounds

In conclusion, I should like to say a word on the subject of finding the bullet Let me warn young surgeons against showing too much zeal in this direction I have seen much harm done by injudicious probing and cutting for the bullet. One should never lose sight of the fact that there are four immediate effects caused by a bullet travelling at high velocity coming in contact with the body—shock solution of continuity of the surface laceration of internal parts, and burning of the parts during the passing of the bullet Imagine the condition of the unfortunate individual when to all this is added probing enlarging of openings, and digging with various bullet forceps There is plenty of time for all these operations afterwards and if the surgeon will turn all his attention to the cleansing and dressing of the wound and the making of his patient comfortable I can predict a large measure of success and a high percentage of

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

NOTE ON THE TREATMENT OF THROMBOSED VARICOSE VEINS BY EXCISION

BY F A. SOUTHAM, M.B OXON, F R.C S ENG,
SURGEON TO THE MANCHESTER ROYAL INFIRMARY LECTURER ON OPERATIVE SURGERY OWENS COLLEGE.

IN an interesting address on the Operative Treatment of Varicose Veins published in THE LANCET of April 8th, 1899, Mr Pearce Gould describes two cases where excision of large thrombi and immediate closure of the wound was attended by very satisfactory results Mr W H Bennett has also advocated and carried out a similar line of treatment [1] Having recently adopted this course with success in a patient who was the subject of very extensive thrombosis of the internal saphena vein in the thigh a brief record of the case may perhaps be of interest

The patient, a male, aged 44 years, had been troubled since he was 18 years of age with slight varicosity of the veins of the right leg below the knee Three years ago the internal saphena vein became involved in the right thigh and on two occasions he had suffered from attacks of thrombosis, limited to this portion of the vessel, necessitating confinement to bed for some time On admission into the hospital on Oct 20th, 1898, he was suffering from a third attack which had commenced 11 days previously The vein from the knee upwards was extremely dilated and filled with firm clot, being plainly perceptible beneath the skin as a prominent cord. It was very painful and tender upon pressure, the skin over it being reddened and œdematous The patient's temperature was 101 6° F He was kept at rest in bed, glycerine and belladonna were applied, and the limb was wrapped in cotton wool Under this treatment the inflammatory symptoms subsided, but there was no indication of any tendency to absorption of the thrombus, the vessel remaining cord like and distended with clot Accordingly, at the end of a month, as the patient was becoming impatient at the prolonged confinement to bed, it was resolved to excise the thrombosed portion of the vein On Nov 10th a linear incision 12 inches in length was made over the course of the saphena vein in the thigh and ligatures were placed round the vessel above and below the varix, which commenced very abruptly about two inches below the saphenous opening and terminated just above the level of the knee joint The thrombosed portion of the vessel which was somewhat tortuous with marked pouching of its walls was then removed between the ligatures The part excised, which was filled throughout with softish clot and measured 15 inches in length, in the greater part of its course was of about the thickness of an adult thumb The wound was closed, no drainage being employed It was dressed for the first time on the ninth day when it was found to be soundly healed The patient left the hospital on Dec 12th and shortly afterwards resumed his occupation as a market porter, which he has since followed

The satisfactory result of the operation in the present instance would certainly induce me to perform it again under similar conditions, for not only was the patient's convalescence hastened—the absorption or the organisation of an extensive thrombus always being a tedious process—but he is freed from any further attacks of thrombosis with the risk of embolism, a complication which is liable to occur when the main trunk of the saphenous vein is involved in the upper part of the thigh

Manchester

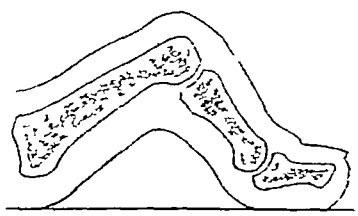
HALLUX VALGUS AND HAMMER TOE

BY T S ELLIS, M R C S ENG, L S A,
CONSULTING SURGEON TO THE GLOUCESTER INFIRMARY

DR W J COLLINS in THE LANCET of April 15th, having spoken of these deformities as being "closely allied,' goes on to state that in a case which he reports "so strong was the valgus impulse that the coincident deformity of a hammer second toe afforded no obstacle" I ask permission to remark that when conditions are "closely allied" it is hardly probable that the existence of one would be an "obstacle' to the co-existence of the other and, also, to show that the common occurrence of both together can be fully explained

All idea of a "valgus tendency" as an "exclusive prerogative of the hallux" or otherwise must be discarded Given free play to the natural functions of the great toe, it will maintain a capacity to come when in action into a line with the inner margin of the foot And this faculty may be re-acquired by exercise of function alone in those who have in very marked form the incipient hallux valgus which is, as a consequence of wearing median pointed boots, well nigh universal When the great toe is at rest it is inclined upwards and outwards over the end of the second toe It is shown thus in the frontispiece to my book [1] as the Position of Rest On the other hand, the smaller toes when at rest are, or should be, straight When in action as toes, they serve as pressing, and not, like the fingers, as grasping organs they are drawn into the position shown in Fig 1 This is essentially

FIG 1



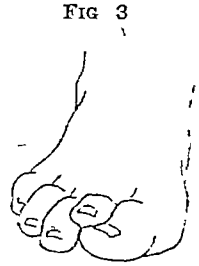
Position of phalanges when the toe is in action.

the same as that given in illustrations of typical hammer toe. It will be seen that the final phalanx rests flat on the ground forming on its upper surface a level bed Now if the great toe be fixed by the median pointed sock and boot when it is in the position of rest, then so soon as the second toe is brought into action the great toe falls on to the level bed thus formed and the arrangement shown in Fig 2 completed Obviously, the second toe

FIG 2

Position of hallux if pressed over second digit

FIG 3



Position of hallux if pressed under second digit.

has, when so placed a difficulty in resuming the straight position, adaptive shortening of the ligaments ensues and permanent hammer toe results So, too, the great toe, never being allowed to attain its natural position in walking, becomes fixed in an exaggerated degree of its inclination when at rest This is the common course of events If, however, the great toe happen to be packed under the second as shown in Fig 3, there is usually a much greater interference with function and a greater degree of irritation in the metatarso-phalangeal joint I discussed these points in a paper read before the Royal Medical and Chirurgical Society in February, 1897,[2] from which the illustrations are taken

I may add that a month is full soon for Dr Collins to feel sure as to the result of his operation If the patient does not give plenty of room for the toes in his boot pressure on

[1] THE LANCET Oct. 15th, 1898, and April 8th, 1899.

[1] The Human Foot.
[2] Transactions of the Royal Medical and Chirurgical Society, vol. lxxx

the dermoid cyst of the right ovary, and, lastly, infection of the dermoid cyst from the abscess which formed between it and the bowel

Southend-on-Sea

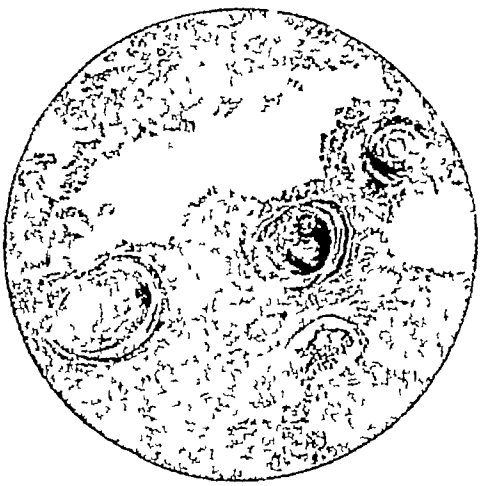
A NOTE ON THE OCCURRENCE OF EPITHELIAL PEARLS IN THE TONSIL

By HUGH WALSHAM, M.A., M.D. CANTAB., M.R.C.P. LOND.,

ASSISTANT PHYSICIAN (FORMERLY PATHOLOGIST) TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST. CLINICAL ASSISTANT TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET

THE late Professor Kanthack[1] in an interesting paper called attention to the occurrence of epithelial pearls in the tonsils of human fœtuses and new born infants and pointed out that they occurred as retentions and not as embryonic inclusions. Professor Kanthack in a later paper, published in the *Journal of Anatomy and Physiology*, vol. xxvi., brought forward weighty arguments against the pearls which are found in the mid line of the palate and in the other places being due to inclusion products, as described by Mr. Bland Sutton in his lectures on Evolution in Pathology. The occurrence of these epithelial pearls in the tonsils of adults is not altogether rare, and while making some observations on the occurrence of tubercle in the tonsil I met with three very good specimens in the tonsils of men aged 27, 31, and 35 years respectively. The occurrence of these pearls in the organ is of interest because I think there can be no doubt that they are the origin of at least some of the so-called tonsil calculi. The accompanying illustrations show very clearly these interesting bodies. In Fig. 1, from the male aged 27 years, three of

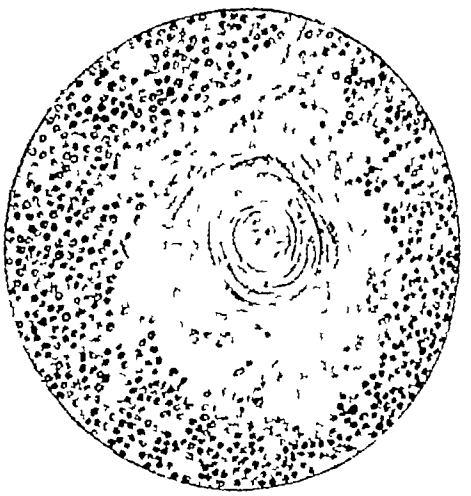
FIG. 1



Vertical section through the tonsil showing three of the pearls

these pearls are seen, the middle one showing evidence of calcification. The centre of these pearls shows no definite structure, it is only on carefully examining the periphery that we see that they are composed of horny, squamous, epithelial cells pressed tightly together. They bear a very close resemblance to the epithelial cell nests found in some of the epitheliomata. Fig. 2 shows another of these curious bodies, which is probably not so old as the former specimens as the epithelial cells can be traced nearly to the middle of the pearl. These pearls are clearly retention products and cannot possibly be due to epithelial inclusion as no fusion of epithelial surfaces takes place in the tonsil. Their occurrence, as before said, is not altogether rare but these are the only three examples met with out of 150 post mortem examinations of tonsils made with reference to this point. Professor Kanthack once informed me that since 1889 he had fairly often observed epithelial pearls in the tonsils at all ages. But in addition to these retention pearls we find epithelial accumulations in the adenoid tissue of the tonsil which, as far as I am able to ascertain, have not before been described. They are mostly to be found in the centre of one of the closed lymphatic follicles and have no connexion with the epithelium lining the tonsillar crypts. According to Professor Retterer[2] both the ectoderm and mesoderm take part in the

FIG. 2



Vertical section through the tonsil showing epithelial pearl in adenoid tissue

formation of the tissue composing the closed follicles of the tonsil. He says the tonsil is formed by epithelial involutions and swelling of the mesoblastic tissue, then by the formation and detachment of terminal epithelial buds. The closed lymphatic follicles are formed by the formation round these buds of lymphoid tissue. As life advances this central epithelial accumulation disappears. I have specimens of tonsils from young persons showing these epithelial accumulations in the centre of the follicles. I think, therefore, they cannot be regarded as either retention or inclusion products, but that they are produced by the normal evolution of the organ.

Harley-street, W.

[1] Kanthack: Illustrated Medical News, Nov. 9th, 1889.

[2] Retterer: Origine et Évolution des Amygdales chez les Mammifères. Journal de l'Anatomie et de la Physiologie, 1888.

CARMARTHENSHIRE COUNTY COUNCIL.—A meeting of the General Purposes Committee of the Carmarthenshire County Council was held on April 19th under the presidency of Sir James Hills-Johnes. A special committee was selected to consider the suggested appointment of a medical officer of health for the county. They were further requested to report upon a proposition which recommended that each district council of the county should be advised to adopt the Infectious Diseases Notification Act.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of this society was held on April 12th, Mr. Christopher Heath, Vice-President, being in the chair. Three new members were elected and the deaths of two were reported. The deaths of two widows were announced, one had been in receipt of grants since January, 1870 and had received £1847 18s., and the other since July, 1874, and had received £1429 10s. A first application was read from a widow for herself and two children and a grant was made. It was resolved to distribute £1201 10s. at the next court to the 48 widows, 12 orphans, and five recipients from the Copeland Funds, now on the funds. Sir Thomas Smith, Bart., was nominated for election as Vice-President at the annual general meeting, and the following gentlemen as directors: Mr. Morley, Mr. King, Mr. Leigh, Mr. Gimson, Dr. Samuel West, and Dr. Whipham. It was decided to hold the annual general meeting on May 31st, at 5 P.M. The expenses for the quarter were £56 10s.

verity of the spasms or in arresting the progress of the sease From beginning to end the symptoms lasted only ' hours

BARBADOES GENERAL HOSPITAL

CASE OF REMOVAL OF 14 URIC ACID CALCULI FROM THE BLADDER BY THE AID OF AN EXTEMPORE RECTAL BAG

(Under the care of Dr T SINCLAIR BROWNE)

SURGEONS are always liable to be called upon to operate when unprovided with many of the appliances which are usually considered necessary and they are very ingenious in devising efficient substitutes, but we do not remember ever to have read of a more ingenious device than that recorded below by Mr F Deane Petersen's bag is not essential in many cases of suprapubic cystotomy, but there are certainly cases when no safe degree of distension of the bladder suffices to raise the bladder so that it may be opened from above, in such instances the value of a rectal bag is often very great For the notes of the case we are indebted to Mr Frederick Deane, junior resident surgeon.

A coloured man, aged 52 years was admitted into Ward 3 of the Barbadoes General Hospital on Jan 19th 1899, with symptoms which were characteristic of vesical calculus He was instructed to retain his urine on the night previously to examination and the bladder was sounded for calculus, and what was thought to be one very large calculus was detected lying behind the middle lobe of the prostate The patient having consented to an operation he was prepared in the usual manner On the 26th Dr Sinclair Browne performed suprapubic cystotomy with the result that 14 uric acid calculi were removed from the bladder The largest of the calculi when dried weighed 106 grains and the smallest 40 grains The patient made an uninterrupted recovery

Remarks by Mr DEANE —As vesical calculus is of exceedingly rare occurrence in Barbadoes our hospital does not possess a rectal bag, and although I was aware that the rectal bag has at times been dispensed with by some surgeons, still I thought it advisable to have some such contrivance in readiness, so I obtained a piece of an old inner tube of a bicycle tyre nine inches long and sealed up one end with ordinary rubber cement, attaching to the other end a small piece of rubber tubing four inches long with an ordinary douche stop-cock attached to it, placing a piece of glass tube inside this rubber tubing so as to give it rigidity to receive the strapping for uniting the two In this way was formed a sausage shaped rectal bag which acted splendidly, for the bladder on being distended with 12 ounces of warm boric lotion did not rise sufficiently above the superior border of the pubes to enable the operator to get freely at the portion of the bladder which is uncovered by the peritoneum, the extempore rectal bag was introduced into the rectum and distended with 12 ounces of warm boric lotion with the result that the bladder was tilted upwards and forwards sufficiently to enable the operation to be performed without any risk of the peritoneum being wounded. I thought that this case might interest other surgeons practising in tropical climates where rubber in the shape of rectal bags and other instruments and appliances is very perishable and where the materials for making such a bag as the one above described can nearly always be easily procured

STATE CHILDREN'S ASSOCIATION —The second annual report of this association the object of which is to obtain individual treatment for children under the guardianship of the State, says that the Bill introduced last session with the object of obtaining for the State further powers of control over neglected children which was unfortunately blocked has again been introduced and has received the sympathy of the Government. The tabulation of results is impossible but it is noticeable that in the first 14 months of the existence of the association 13 recommendations of the Departmental Committee on Poor law Schools were carried out, while the present report tells of 10 others which have been adopted or are in course of adoption The report can be obtained price 3*d* at the office of the association 58 Old Broad street E C and also of Messrs P S King and Son, 274, Great Smith treet S W

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Clinical Examination of the Hæmic Leucocytes —Dysarthria

A MEETING of this society was held on April 25th, the President, Mr BRYANT, being in the chair

Dr A. G PHEAR read a paper on the Clinical Examination of the Hæmic Leucocytes The purpose of this communication was to lay stress on the advantages of fluid preparations over the cover slip method more commonly in vogue in the study of the hæmic leucocytes In the cover slip method many of the leucocytes were inevitably flattened and distorted in the process of making and fixing the film, some were washed away during the staining of the film, others were obscured by the largely preponderating number of red corpuscles Distortion rendered accurate measurement and drawing of the cells impossible In the fluid preparation the white cells were fixed and preserved as approximately spherical bodies, they were undistorted and camera lucida drawings and measurements could be relied on as accurate. The thickness of the unflattened cell was not a disadvantage, by gradually focussing from above downwards through the depth of the cell views could be obtained at different focal planes which were equivalent to a series of horizontal sections and a good idea was gained of the shape and disposition of the nucleus and other structures within the cell In preparing the fluid film a solution of methylene blue (0 2 per cent.) in 40 per cent. alcohol was used for diluting the blood The advantage of the alcoholic solution was that it laked the red corpuscles, so that the white cells alone remained conspicuous A small quantity of the diluting solution was added to a drop of blood on a glass slide and the two were thoroughly mixed by directing a current of air through a pipette on to the surface of the fluid The fluid was allowed to spread as a thin film under a cover glass and the edges were then sealed with vaseline The procedure took about three minutes The preparation might be examined at leisure with an immersion lens and was available equally for a differential count of the leucocytes and for the study of individual cells As to the normal leucocytes in fluid films the contour of the polymorphonuclear cells was, with rare exceptions, rounded Their diameter varied from 9 to 10 μ, this was smaller than the apparent diameter of the flattened cells in dried preparations With regard to the complex nucleus it could in almost every case be made out, by gradually changing the focus that connecting strands passed from one lobe to another the nucleus being, in fact, an undivided elongated body, in places deeply constricted, elsewhere bulged into rounded lobes The lymphocytes and the large hyaline cells represented the extremes of a single group of cells, the members of which differed in no essential particular save in the amount of protoplasm around the nucleus, all grades between the extreme forms were readily found in normal blood It was remarkable that the nuclear diameter was fairly constant in the cells of this group, varying only between 4 5 and 5 5 μ In films prepared by the method advocated a group of cells could be differentiated (large oval cells) which found no place in commonly accepted classifications The cells were the largest of the normal leucocytes and the only ones whose forms departed notably from the spherical They might be as much as 14 μ in length Their contour was oval and the nucleus was large and irregular, usually reniform The protoplasm became rapidly and uniformly stained an opaque blue colour with methylene blue The coarsely granular or eosinophile cells (diameter from 9 5 to 10 5 μ) were at once recognised in the film prepared with methylene blue solution notwithstanding the absence of an acid dye, the large refractile granules were conspicuous and were tinged a greenish colour The cells containing basophile granules (diameter about 8 μ) had a characteristic appearance The protoplasm contained granules of medium size, many of which were aggregated in one or more deeply stained clumps near the surface of the cell The non granular part of the protoplasm was stained a peculiar mauve or purple colour The nucleus consisted of a number of lobes usually massed at the

the cicatrix may result in a keloid condition giving cause for regret that amputation of the toe was not preferred

Gloucester

"REPLACEMENT OF A SEVERED PORTION OF THE NOSE"

WE published on March 11th an interesting clinical note by Dr W M Abbot-Anderson bearing this title Briefly the case was as follows A man while in the act of sharpening a knife cut off a portion of his nose The piece

was found and sewn on again by Dr Abbot-Anderson with precautions which he described in detail in our columns and which the accompanying illustration reproduced from a photograph of the patient shows to have been crowned with success

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb* lib. iv Proœmium.

ROYAL FREE HOSPITAL

A CASE OF ACUTE TETANUS TREATED BY SERUM, DEATH, NECROPSY

(Under the care of Mr JAMES BERRY)

IN THE LANCET of April 22nd was recorded a case of tetanus in which recovery followed the employment of tetanus antitoxin and we pointed out then that the cases in which the anti tetanic serum appeared to be of most value were those in which a long incubation period had occurred between the infliction of the wound and the appearance of the symptoms In the case recorded below six days elapsed between the injury and the first signs of the disease This is decidedly a short incubation stage and it would of itself suggest the probability of a very severe attack, for the shorter the period of incubation the more acute are the symptoms The very rapid progress of this case is remarkable Cases lasting a much shorter time have, indeed, been described but many of them are more than doubtful. The often quoted case related by Robinson of a negro butler who died from tetanus a quarter of an hour after cutting his hand with a broken plate need not at the present time be seriously considered With regard to the anti tetanic serum treatment in the case recorded below 35 cubic centimetres in all were administered with no sign of improvement and, on the other hand, with no manifestation of any symptoms of poisoning from the antitoxin In the present uncertain state of our knowledge of this still novel method of treatment all cases in which it is employed, especially those ending fatally, should be put on record For the notes of the case we are indebted to Mr T Percy Legg, F.R.C.S., senior resident medical officer

A man, aged 27 years, was admitted into the Royal Free Hospital on Jan 18th 1899, and gave the following history On the 12th he was climbing over some railings and ran one of the spikes through his boot into the ball of the great toe of the right foot He took no notice of the accident as it gave him no trouble and he remained well till the 18th, on which day he went to work as usual but about 1 30 P.M. had pain in the back and neck. Soon afterwards he was unable to open his mouth for more than a quarter of an inch and could not swallow At 6 P.M. he attended at the hospital and was admitted There was well marked tonic spasm of the masseters The back was somewhat arched and the muscles were rigid and prominent The head was drawn backwards, there was slight twitching at the angles of the mouth and the corrugatores supercilii were in action The abdominal muscles were hard and rigid The temperature was normal and the pulse was 120 per minute The patient was quite unable to swallow liquids On the right thumb there were two clean recent cuts and on the ball of the right big toe there was a suppurating wound half an inch long This was opened and about a drachm of pus was let out, the wound was scraped well and swabbed with one in 20 carbolic lotion At 10 P.M. on the day of admission 10 cubic centimetres of antitoxin (Jenner Institute) were injected into the muscles of the back and 40 grains of potassium bromide with 20 grains of chloral were given by the rectum. At 4 A.M. on the 19th he had a well marked clonic spasm with opisthotonos, *risus sardonicus* was well marked He was cyanosed and sweated freely Another 10 cubic centimetres of antitoxin were given as well as the same amount of chloral and bromide as before At noon the symptoms were more pronounced, the abdominal muscles were very hard and retracted and there was marked retraction of the head, the chin being thrown high upwards There was constant twitching at the angles of the mouth, together with well-marked risus, the masseters were very hard Another 10 cubic centimetres of antitoxin were given The wound in the foot was excised freely One-fifth of a grain of morphia was given hypodermically At 2 P.M. he had been sleeping on and off since the morphia was injected, but awoke every few minutes with a clonic spasm which became rapidly more violent and tonic in character The temperature was normal and the pulse was 144 Another five cubic centimetres of anti toxin were given at 3 P.M. About 4 P.M. the patient had a violent tonic spasm, the back was arched backwards completely, so that he rested almost entirely on his head and heels He died in this attack, the muscles at once becoming relaxed, the jaw dropping, and the abdomen becoming flaccid No urine was passed while he was in the hospital

Necropsy—On a post-mortem examination being made it was found that rigor mortis was not marked The vessels of the brain were congested, the arachnoid was thickened and opaque, and the brain substance was firm The spinal cord above the lumbar enlargement was very soft and in the arachnoid there were numerous white hard (? calcareous) spots, varying in size from that of a pin's head to that of a split pea, they were most marked in the cervical region and over the corda equina Except that the lungs, liver, spleen, and kidneys were all much congested there was nothing else to note in the examination

Remarks by Mr BERRY—The chief points of interest are the very rapid course of the disease and the uselessness of the treatment by antitoxin in such very acute cases On admission the patient had already well marked opisthotonos and although the serum treatment was begun within 10 hours of the onset of the first symptoms of the disease it did not apparently exert the slightest influence in mitigating the

flexure of the colon with a possible extension over the anterior and superior surfaces to form a sub-diaphragmatic collection Four cases were detailed as illustrating this sequence of events In the first case a male, aged 18 years, was admitted into the hospital with a first attack on the second day of illness having a well marked localised mass in the right iliac fossa. As it was evident that he had a fluid collection an exploration was made the next day The appendix was found to be gangrenous on one side and stinking semi purulent fluid was evacuated. His temperature dropped for a little while and then rose again, in connexion with a fluid collection beneath the liver This was opened by an incision parallel to the costal margin running into the loin and drained His progress afterwards was slow but quite satisfactory The second case was that of a little girl, eight years of age, who was admitted into the Children's Hospital, Shadwell, on the fourth day of illness with a well marked lump in the right iliac fossa, there was no history of any previous attack. On the eighth day it was evident that there was a collection of fluid, and this was opened setting free a considerable quantity of offensive pus The appendix was embedded in adhesions and no perforation was found. After an apparent quiescence there was a fresh rise of temperature associated with a collection below the liver This was explored on the fifteenth day and about half a pint of pus was evacuated Except for a little jaundice there was no further trouble The next case was that of a boy, aged 16 years who was admitted into the hospital with a collection of fluid in the pelvis and lower abdomen and who gave a history of appendix trouble starting some four weeks previously This was opened in the right iliac region and a large quantity of pus was evacuated which had been shut in by adherent small intestine, the appendix was not found His progress for a week was satisfactory and then he developed a parotid bubo on the left side which suppurated and was opened After another fortnight his liver dulness was found to be raised and this was associated with signs of fluid at the right base An exploration was made below the margin of the ribs and the liver proved to have dense adhesions on both the upper and under surfaces, no pus was discovered A hypodermic needle was passed into the pleura but only with a negative result After this his nightly rise of temperature with emaciation strongly suggested pus or tuberculosis As some œdema was noticed over the right lower spaces laterally a portion of the tenth rib was removed and foul pus was set free from a localised cavity From this time on he gradually improved, leaving the hospital after a stay of about three months There was no actual proof in this patient of any sub-diaphragmatic collection, but the lung signs ending in the empyema gave some colouring to this view The last of the four cases that of a boy 12 years of age was of a different type but it was a case of considerable interest in which the patient after the symptoms of appendicitis developed a small abscess in the abdominal wall below the costal margin outside the rectus This on exploration was proved to have tracked upwards from the pelvis where there was another small collection, a granulating track uniting the two Subsequently a fæcal fistula formed which contracted up to a very small hole after an unsuccessful effort to close it The difficulty was to determine whether the pus below the costal arch was extra peritoneal or intra peritoneal, the infection having travelled up the colon taking the whole lesion into consideration an intra peritoneal course seemed the more likely —Mr J H MORGAN said that the series of cases which had been brought forward presented sequelæ which were most unusual and that Mr Robinson was to be congratulated upon the results which he had obtained in these complicated cases —Mr BATTLE, after congratulating Mr Robinson on his results, mentioned a case of sub-diaphragmatic abscess in a boy who was admitted to the hospital with acute suppurative peritonitis of four days duration The appendix was removed but the boy developed a sub-diaphragmatic abscess which made its way into the pleura and the patient was eventually relieved by an extensive resection of ribs These collections track up along the peritoneal surface of the bowel and collect on the under surface of the diaphragm In two other cases he had failed to reach the abscesses owing to their small size and they were only found at the necropsy —Dr HADLEY related a case of localised peritonitis in the upper part of the abdomen This was opened The patient then developed signs of fluid at the base of the right lung, this gradually cleared up, but the sinus beneath the liver still continued to discharge This was again explored and the abscess cavity was found to track down to the cæcum.—Mr MCADAM ECCLES said that these collections of pus were intra peritoneal and not subserous, the pus tracking up along the surface of the bowel He mentioned the case of a boy with a collection of pus in the right iliac fossa, this was opened, but another collection developed in the right lumbar region just below the kidney He thought that the tracking of pus was due to imperfect drainage and suggested that a counter incision should be made in the loin —Mr H B ROBINSON said, in reply, that he did not think it necessary to make a counter incision in all cases as the majority did well without it, although under certain conditions it might be necessary

Mr W ARMSTRONG (Buxton) read a paper on the Effects of Nitrogen Gas in the Excretion of Urea and Uric Acid He said that he had tested the urine of a number of patients most of whom suffered from gout and had verified the observations of Dr Luff that in the great majority of cases the amount of uric acid excreted was below the normal, but he had also observed that while drinking or bathing in the Buxton thermal waters there was a constant and in many cases a considerable increase in the uric acid excretion He thought it probable that nitrogen gas which was present in very large quantity in these waters although generally regarded as therapeutically inert, accounted for the relief which the gouty experienced from the use of these waters A long series of observations had been made, not only on himself but also on a number of patients, in order to prove the point, and the results obtained from this investigation were as follows 1 That the excretion of uric acid and urea (more especially of the former) and also the flow of urine is largely increased by the drinking of or by immersion in the Buxton thermal water 2. That it is even more efficacious when bathed in than when drunk as regards the excretion of uric acid 3 That the diuresis is somewhat greater when the water is drunk than when it is used as a bath 4 That any deviation from the normal temperature either by heating or cooling interferes with its efficacy 5 That the alteration in temperature would not be likely to prejudice the therapeutic properties of the salts, but that, on the other hand, it would greatly interfere with the contained gases 6 It being generally conceded that while the skin will not absorb water and salts it will take in gas readily the effects of the bathing may be due to this factor 7 That under ordinary circumstances the higher the temperature to which a bath is raised the more likely it is to bring about an acute attack of gout With these waters, however, the tendency while powerfully shown by an 82° bath became less evident with each increased degree of heat, the patient feeling perhaps stiffer and sorer, but an acute attack rarely coming on.—Dr LUFF said that the observations of Mr Armstrong that there was a diminution in the quantity of uric acid in the urine before an attack of gout agreed with the results which he had obtained some time previously, although opposed to the generally accepted view that there was an increased excretion of uric acid in the period preceding an attack He was quite prepared to think that nitrogen as it occurred in the natural water had some remarkable action in increasing the amount of uric acid excreted in spite of the fact that it was generally regarded as an inert gas In reference to this point he said that he had shown that the ash of certain vegetables had a marked solvent effect on uric acid, whereas the artificial ash of apparently exactly the same composition had no such effect

Mr WILLIAM BAIN (Harrogate) read a paper on the Relative Excretion of the Nitrogenous Waste Products in a case of Liver Abscess The patient was admitted into St Thomas's Hospital under the care of Mr Makins on Nov 17th and died on Dec. 23rd. Four months previously to admission he had had an attack of dysentery in China which recurred a few weeks later accompanied by jaundice Four days after a preliminary operation Mr Makins inserted a trocar and cannula into the liver, when 48 ounces of chocolate-coloured pus welled up The wound continued to discharge large quantities of fluid daily and the patient became progressively weaker At the necropsy the liver was greatly enlarged and in the right lobe were six abscess like areas, on an average of about the size of an orange, one of which had been drained by operation The substance of the right lobe was obviously diseased, being of a mottled red and-white colour Apart

centre of the cell and stained a slate or greyish blue colour A solution containing acetic acid (0 3 per cent), as sometimes recommended, was not a good medium in which to examine leucocytes, since it rapidly produced changes in their structure and probably destroyed many of the coarsely granular cells The protoplasmic envelope of the lymphocyte was swollen and in making differential counts the swollen lymphocytes were liable to be estimated as large hyaline cells Degenerative changes rapidly took place in many of the polymorphonuclear cells, and for these reasons solutions containing acetic acid must be regarded as unsuitable for the dilution of blood The fluid film made with the alcoholic solution of methylene blue recommended for use was, on the other hand, both convenient and trustworthy Separate counts over different areas of one preparation gave uniform results, showing that the blood was evenly mingled with the diluting fluid Not less than 500 cells should be enumerated at a time, the more the better It was desirable to use a mechanical stage and to work with an immersion lens The blood should always be procured, if possible, before the first meal of the day was taken, since this was the time at which the influence of meals was least likely to be evident It was remarkable how small was the range within which the percentages of the commoner forms of leucocyte varied from day to day if this rule be observed For a healthy individual the following figures represented the limits within which the percentage of the several cells usually lay at the time stated (1) polymorphonuclear cells, from 45 to 60 per cent , (2) rounded hyaline cells, from 35 to 45 per cent (inclusive of lymphocytes from 10 to 20 per cent , and large hyaline cells, about 2 per cent), (3) large oval cells, with irregular nuclei, and protoplasm which stained diffusely in solutions of methylene blue, from 5 to 10 per cent , (4) cells containing coarse oxyphile granules, from 1 to 1 5 per cent , and (5) cells containing basophile granules, from 0 3 to 1 per cent —Dr ALFRED HILLIER asked what was the clinical significance of the variations in the numbers of the various kinds of leucocytes He also asked in which category Dr Phear would place the "wandering cell" of Koch and the phagocyte of Metchnikoff —Dr PHEAR said that the paper was only a preliminary one and he had purposely left out pathological considerations He did not know in what class the wandering cell should be placed The phagocyte would probably be classed as a coarsely granular eosinophile cell

Dr PARKES WEBER read a paper on a case of Dysarthria and Delay in Learning to Speak following Cerebral Disturbance in Infancy The patient who was shown to the society belonged to a healthy family and was seven years of age. The history was that at two years of age he was learning to speak like other children when he was attacked by some acute disease with cerebral symptoms which left him unable to speak, but apparently unaffected in other ways When seen at five years of age he was able to utter peculiar sounds like those of wild animals, doubtless an attempt at articulate language He was physically fairly well developed, could hear well, understand what was said to him, and appeared to be of average intelligence He then gradually began to speak, though with obvious difficulty in getting the sounds out and with great defects in pronunciation, dropping the consonants at the end of most words and replacing the sounds of K, G (hard or soft), Ch and S by a D sound or T sound Such "lalling" like defects, together with stammering, rendered his speech most imperfect He could recognise single figures and the letters of the alphabet, but could hardly recognise even short words when shown them on paper He sometimes made mistakes in writing his own Christian name, although he had doubtless been repeatedly drilled at it He could not recognise his name when shown it in printed characters He seemed, in fact, almost word blind Such was his condition at the age of seven years, when seen in January, 1899 He was now making rapid progress in pronunciation Dr Weber considered that the condition might best be accounted for by supposing that the infantile illness injured the cortex of both cerebral hemispheres chiefly affecting the speech centres (parts concerned in some of the most highly differentiated functions of the brain) The present case and similar cases differ from the typical ones of cerebral diplegia, with bulbar (pseudobulbar) symptoms, in the fact that the movements of the palate and the mechanism of swallowing are not in the least affected The speech defect in this case, as in other similar cases, was probably a minor form of what had been described as "idio-glossia" by Hale White and Golding Bird, and for which F Taylor has suggested the terms "idio-arthria" or "idio-phasia" A practical point in regard to the present case and similar cases was that the speech centres, although damaged by some early disease, seemed nevertheless capable of ultimate fairly normal development This was confirmed in the present instance by the rapid progress which the boy was making since real trouble had been taken in teaching him by the oral and other methods.—Dr FLETCHER BEACH said that from the description of the case there seemed to be some mental defect This was especially suggested by his reversing his words when reading, such as "no" for "on,' and although he could count he could not do easy sums in which some amount of reasoning was required In his language he seemed to have reverted to baby language and Dr Beach asked if there was clear evidence that he had spoken clearly before his illness The attempt at speech which Dr Weber described as like wild beasts' noises was often seen in cases of mental defect. Children of this kind were sometimes supposed to be deaf and dumb when they could hear, but had inability to articulate He thought that with proper teaching by someone accustomed to teach deaf mutes he would soon improve —Dr RUSSELL WELLS related the case of a child who was born at the eighth month and suffered from infantile paralysis affecting one leg during the first year He was five years before he could talk and then spoke "baby language" and read backwards, reading "saw' for "was ' At the present time he was 19 years old and was distinctly above the average in mental attainments, having learned very rapidly the last six years, and he could speak distinctly He thought that in this and in Dr Weber's cases there was an arrest of development of the faculty of speech and not any organic lesion —Dr SHUTTLEWORTH also thought that the description of the case suggested that there was some backwardness of general mental development, there being paucity of ideas as well as difficulty in expressing them Reverse writing and reading were common in backward children Dr Ashby in examining defective children for the Manchester School Board found that a large proportion wrote "Dog' when told to write "God,' and Dr Shuttleworth had seen this among the defective children whom he had examined for the London School Board The gutturals and the final consonants appeared to give more difficulty than the other consonants and Max Müller held that these were apt to be omitted in lazy speech and that word clipping was characteristic of decaying nations He related the case of a child who was said to have lost his speech at the age of five years after a convulsion during whooping cough For some time he could only say a few elementary words but at the age of 14 years he could hold a conversation with fairly distinct utterance —Dr REGINALD LANGDON DOWN thought that it was unlikely that there had been any local inflammatory lesion as it was difficult to see how meningitis could have selected a small symmetrical region in each hemisphere, and he regarded the case as one of arrested development of the speech faculty —Dr WEBER, in reply, thought that if Dr Beach and Dr Shuttleworth had had an opportunity of examining the boy they would have agreed that there was no marked mental defect The reversal of the letters of a word had only been observed on one occasion and his inability to do sums might be due to his age When he was an inpatient at the German Hospital he was not considered to be defective

MEDICAL SOCIETY OF LONDON

Appendicitis —Effects of Nitrogen Gas in the Excretion of Urea and Uric Acid —Relative Excretion of the Nitrogenous Waste Products in a Case of Liver Abscess

A MEETING of this society was held on April 24th, Mr J H MORGAN being in the chair

Mr H BETHAM ROBINSON read a paper on Some Complicated Cases of Appendicitis in which the abscess in relation with the appendix was attended by suppuration later in the neighbourhood of the liver This infection of the peritoneum is very liable to spread along the ascending colon when the adhesions are defective and possibly aided by the recumbent position and natural curve of the lumbar region The pus collects in the right hypochondrium in the space between the inferior surface of the liver, the upper part of the right kidney, and the hepatic

Professor JAPP SINCLAIR (Manchester) said that on all essential points he found himself in entire accord with Dr Smyly All the cases of shock which he had seen had been due to hæmorrhage He therefore looked on shock and hæmorrhage as equivalent, with a very few exceptions, such as cases of heart disease. One cause of death was a want of tone in the bowel, which in some cases was chronic, the result of chronic constipation. These patients might go on all right for a few days, then symptoms of intestinal paresis came on and the patient succumbed. With regard to peritonitis he believed that there was a non-septic form and in these cases purgation was successful, but he did not believe that purgation succeeded when the peritonitis was septic, on the contrary, it might make matters worse. As far as he knew no micro-organism except the streptococcus led necessarily to a fatal result His experience of anti-streptococcic serum coincided with that of Dr Smyly The serum might reduce temperature, but he had not seen a case where it had saved the patient's life

Dr WILLIAM WALTER (Manchester) thought that Dr Smyly was right in drawing attention to shock as in itself a cause of death. The best way to prepare against the tendency to shock was to fortify the heart's action with strychnine and to operate in a warm room, guarding against cooling of the intestines with warm compresses, &c. Perhaps the best thing of all was the Trendelenburg position, since this had been introduced patients seemed to bear difficult operations much better It was often difficult to diagnose shock from internal hæmorrhage Proper attention to the pedicle was one of the most important safeguards against hæmorrhage. If it were necessary to reopen for hæmorrhage he advocated the plan of opening the vagina instead of the abdomen, washing out with very hot water, and packing with gauze

Dr GEORGE ELDER (Nottingham) observed that shock was not so often seen at the present time as formerly because operations were now done more quickly and under better conditions No doubt many deaths formerly put down to shock were really due to hæmorrhage. There was one symptom which he had not seen described but which he believed to be pathognomonic of hæmorrhage—viz intense pain, of a shooting character, uncontrolled by morphia He was surprised to hear Dr Smyly give the credit of aseptic surgery to Bantock and Tait He was himself an old pupil of Lister and he felt sure that what they knew of asepsis was due entirely to the untiring efforts of Lister during the last 25 years There was one kind of sepsis which no antiseptic precautions could get rid of and which only time could render harmless and that was the sepsis arising from operations for puerperal peritonitis or for the clearing out of a putrid placenta.

Mr J W TAYLOR (Birmingham) said that he did not think that he had ever seen a death due directly to shock, though he had seen cases where death was due to sepsis, predisposed to by hæmorrhage and shock. As regards ileus he thought the use of dry sponges might lead to it for he had had more difficulty in getting the bowels open after the use of dry than after moist asepsis He believed that the three chief factors in the production of sepsis were sponges hands and the breath of the operator He always tried to get the bowels open by six o clock on the morning following the day of operation, if they were not opened then he gave small doses of calomel Another way to combat sepsis in cases where the kidneys were acting badly was by means of the hot air bath, he believed he had seen this treatment save several patients.

Dr HEYWOOD SMITH said that a point which Dr Smyly had omitted was the question of the idiosyncracy of the patient There were some patients who were described as slow healers and who tended to go to the bad, and it was well to keep such cases some days in hospital before operation With regard to sepsis he would observe that there were many different practices with regard to ligature material, he was sure that catgut had caused inflammation in some cases As every time-saving detail was of importance he thought that Greig Smith's forceps needle was a useful thing, it was a fine pointed forceps passed through the tissues as a pedicle-needle, it was then opened and the ligature could be rapidly seized and drawn through

Dr DUDLEY BUXTON said that there was one aspect of anæsthetics which bore upon the discussion—viz the relation of chloroform to shock The shock of operation was to a great extent caused or enhanced by the physical effect of chloroform which was most marked in anæmic persons and in those who had lost much blood during operation and the explanation of the action of chloroform under these conditions was to be found in the alteration of pressure of the abdominal contents after the abdomen had been opened The Trendelenburg position minimised shock by assisting gravity in the prevention of cerebral anæmia. Another important point about chloroform was its liability to cause post-operative hæmorrhage.

Dr THOMAS EASTES (Folkestone) mentioned two cases of pseudo-ileus The first was that of a patient suffering from myoma and ovarian cyst The latter was removed by ovariotomy the myoma being left After a few days symptoms of ileus came on He opened the abdomen and put a tube into the colon, but the patient died, and he thought that death was due to the myoma acting as a ball valve and keeping up the obstruction In the other case the obstructive symptoms were due to hæmatocele and he stopped all feeding by the mouth, gave nutrient and aperient enemata, and small doses of calomel The result was satisfactory

Dr R. T SMITH believed that patients might die from simple shock Thus he had had a case of double ovariotomy, the operation presented no difficulty, but an hour after the patient's pulse was 160 and she died in two days The necropsy showed no hæmorrhage or other cause of death and he believed that it was due to vaso-motor paralysis.

Mr CHARLES RYALL said that there were cases where the shock was quite out of proportion to the time taken by the operation, such as operations involving the mesentery and hysterectomy There was always shock at the moment when the uterus was being severed. In the preventive treatment of shock flushing the abdominal cavity was a good thing

Dr SMYLY observed that he had no idea of detracting from Lister's fame, antisepsis came first asepsis later, and that in consequence of antisepsis But Tait first showed that antiseptics were not only useless but injurious to fresh wounds, he also emphasised the importance of avoiding contamination of the operator s hands and this teaching had led to the modern aseptic methods

The PRESIDENT said that he believed that death from shock was almost always due either to hæmorrhage or to operation on a patient whose condition was not good enough for operation The kind of case that he most dreaded operating on was not the patient who thought she was going to die, but rather the nervous woman who threw herself about after operation. To tie her down and to give her freedom both had drawbacks in the former case the patient got worse and in the latter she might break open the wound

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LIVERPOOL MEDICAL INSTITUTION—A meeting of the Pathological and Microscopical Section of this society was held on April 20th, Dr Karl Grossmann being in the chair—Dr John Hay gave an account of a case of Stenosis of the Conus Arteriosus Dexter He demonstrated that in the normal heart the cavity of the right ventricle might be divided into two parts—the sinus and the conus—which were frequently marked off from one another by a muscular constriction In this case the narrowing was so great as to produce obstruction There was great hypertrophy of the right heart and there were large vegetations in the conus and on the pulmonary cusps The septum was complete and the ductus arteriosus was closed There was no evidence pointing to congenital heart disease The heart was obtained from a female subject aged 20 years Dr Hay fully illustrated his remarks by specially prepared specimens, by casts of the cardiac cavities and by lantern slides—Dr Abram read a note on a case of a rare Lesion of the Kidney believed to be a carcinoma affecting the glomeruli and giving rise to numerous secondary growths—These notes were discussed by Dr Lowenthal, Dr Buchanan, Mr Larkin, Dr Barr and Dr Archer—The following specimens were shown—Dr Nathan Raw Organs from a case of Cancer of the Breast containing a large amount of secondary deposit—Mr Thelwall Thomas Implantation Cysts of the Hand and Finger—Mr Douglas Crawford A Right Ovarian Dermoid obtained from a multiparous woman, aged 32 years The tumour at the time of operation was in a state of infarction from twisting of the pedicle—Mr Hawkins Ambler showed a specimen of Villous Cancer of the Cervix Uteri The specimen was obtained from masses removed by curetting as a preliminary to hysterectomy—Mr Newbolt (1) Portions of a Knee-joint of a woman, aged 29 years excised for Rheuma oid Arthritis of five years duration and accompanied by great pain, (2) an Epithelioma of the Antrum from a man aged 53 years, and (3) an Adeno-myxoma of the Parotid.—Dr Buchanan (1) Urethral Caruncle, (2) Fibroid Epulis, and (3) some

from two small ulcers in the intestine and the cortex of both kidneys being thickened, the remaining organs were normal The urine of the 24 hours was collected and submitted to analysis Quantitative estimations were made of the urea, uric acid, phosphoric acid, ammonia, lactic acid, and alloxuric bases Taking into consideration the diet and excluding lactic acid, which was only estimated when the patient was in a semi moribund condition, the results obtained were regarded as coming within the normal physiological variations The interest in these results lay in the fact that although considerable portions of the liver were distinctly abnormal, yet its functions apparently were efficiently performed

HARVEIAN SOCIETY OF LONDON

Exhibition of Cases

A CLINICAL meeting of this society was held on April 20th, Mr H E JULER, President, being in the chair

Mr JACKSON CLARKE showed a girl, aged three and a half years, suffering from Unilateral Coxa Vara The patient when first brought to hospital walked with a pronounced limp, the body lurching to the left when the foot of that side was placed upon the ground On examination the left great trochanter was found to be nearly on a level with the anterior superior iliac spine There was neither eversion nor inversion of the limb and the head of the femur was felt to move smoothly in the acetabulum The patient had severe rickets The treatment adopted in this case consisted in the use of an extension apparatus which was worn continuously

Mr JACKSON CLARKE also showed photographs of a girl, aged six years who had Congenital Dislocation on the Left Side The trochanter in this case had been two inches above Nelaton's line and on manipulating the limb the head of the femur was felt to move about on the surface of the ilium Mr Clarke reduced the dislocation by Lorenz's method under anæsthesia It was not until the final movement—that of abduction—was made that the head of the femur was felt and heard to slip into its socket The thigh was then fixed in the completely abducted and partly everted position by plaster bandages reaching from the iliac crests to the foot This position was maintained for 10 weeks when the bandage was replaced by another with a slightly diminished degree of abduction The patient now wears a steel instrument and a considerable degree of abduction is kept up, the patient walking with a patten on the right foot When the instrument is properly adjusted the head of the femur is in the acetabulum The now extensive experience of the results of Lorenz's bloodless method of reduction had proved that congenital dislocation of the hip up to a certain age was a curable affection —In answer to Mr ROUGHTON Mr CLARKE said he thought that some cases of coxa vara were of the nature of green stick fracture of the neck of the femur

Dr ROBERT MAGUIRE showed a woman who presented the physical signs of an Aneurysm Involving the Arch of the Aorta and the Innominate Artery Dr Maguire had seen very little good result in such cases from prolonged rest in bed and low diet —Dr HARRY CAMPBELL noticed that Dr Maguire attributed the arterial sclerosis in this patient to syphilis and asked whether a connexion between the two had been definitely established He thought that the patient had granular kidneys as the heart was hypertrophied and there was albuminuria He suggested by way of treatment the introduction into the aneurysm, through an insulated trocar, of several feet of fine-drawn gold wire and the employment of a mild galvanic current, the wire being left *in situ*, a method which had yielded good results He did not think that patients with thoracic aneurysm should be doomed to months of enforced rest —Dr CAUTLEY expressed surprise at the unfavourable opinion Dr Maguire had formed of the treatment by rest and low diet Although hospital patients were rarely suitable subjects, seeing that the aneurysm was commonly due to a combination of strain, alcohol, and syphilis, he maintained that among the better classes good results could sometimes be obtained by strict Tufnell's treatment He referred to a very severe case of aneurysm of the transverse part of the arch of the aorta due to strain in a man aged 37 years After a diet of six ounces of solid food and eight ounces of liquid daily, with absolute rest, for a period of 10 weeks the patient recovered completely and lived for another 25 years without any recurrence Similar good results might still be obtained in suitable cases —The case was also discussed by the PRESIDENT and Mr RAYMOND JOHNSON —Dr MAGUIRE replied

Mr ROUGHTON showed a man who in December last sustained a Simple Fracture of the Humerus extending from the deltoid insertion obliquely upwards for about two and a half inches As it was found impossible to keep the fragments in apposition by means of splints Mr Roughton cut down upon the fracture and secured the ends by means of two silver wires passed horizontally round the bone The patient recovered with a shapely and freely moveable arm The position of the wires and of the fracture after operation was demonstrated by a skiagraph

Dr WHITFIELD showed a woman, aged 56 years, who was the subject of Extensive Lupus Erythematosus of 10 years' duration The eruption began behind the left ear and had gradually spread causing a bald cicatricial patch reaching nearly up to the occipital protuberance The edges of the patch when the disease was still active were red and somewhat infiltrated On the nose and both cheeks were numerous discoid patches showing very little tendency to involution and large areas of fine white scarring Both ears were extensively affected on the inner aspect of the conchæ The patient presented no evidence of any other organic disease —In reply to the PRESIDENT Dr WHITFIELD said that the treatment of lupus erythematosus might be divided into "palliative" and "active" In the first class he would include the use of soothing and protective lotions, powders, and ointments, and in the second the use of such drugs as pyrogallic acid chrysarobin, and the oxydised compounds of these drugs, mercurial ointments and plasters, also operative measures such as scarification and the application of the fine galvano-cautery He proposed in this case later to use mercurial applications and if these did not succeed he should try the effect of tattooing the spreading edges with the galvano-cautery, as he had seen great benefit from this line of treatment in obstinate cases of the disease It was necessary to reserve all the active forms of treatment for use when the disease had been reduced to as quiescent a state as possible, otherwise one was liable to do more harm than good

Dr JAMES TAYLOR brought forward a well marked case of Disseminated Sclerosis occurring in a young girl.—In answer to a question by Dr HARRY CAMPBELL it was stated that there was no defect of speech and no emotional excitability The patient was gradually getting worse and it was considered that the prognosis was hopelessly bad

Dr HARRY CAMPBELL showed a case of Complete Paralysis and Atrophy of the Scapular Portion of the Trapezius apparently due to the involvement of the spinal accessory nerve in an old cicatrix The case showed the important part taken by this muscle in keeping the scapula in position The bone was considerably altered in position, the glenoid cavity looking downwards and outwards and the inferior angle projecting as in "winged" scapula, the outer part of the clavicle was bent downwards by the fall of the acromion and coracoid process The patient showed an occasional tendency to a form of wry neck from over-action of the opposite trapezius —In answer to Dr JAFFE Dr CAMPBELL stated that the lower part of the muscle showed the reaction of degeneration

Dr LEONARD GUTHRIE demonstrated upon a case of Locomotor Ataxy the treatment of the disease by specially arranged exercises as suggested by Frenkel The power of coördination had been considerably improved

BRITISH GYNÆCOLOGICAL SOCIETY

Abdominal Causes of Death after Celiotomy

A MEETING of this society was held on April 13th, Dr H MACNAUGHTON-JONES, President, being in the chair

Dr W J SMYLY read a paper on Deaths after Celiotomy In this paper, which we shall publish in full at an early date he considered those deaths under the eight heads of shock, hæmorrhage, ileus, uræmia, inanition, tetanus, embolism, and sepsis, most attention being devoted to shock

The PRESIDENT observed that the paper touched on all those vital points in the post-operative period which made even the most experienced operator anxious and the interest in them was universal

cases and this the author freely acknowledges, but he says that "artificial eczema runs a definite course and the process is always under the patient's own control—to this extent at least that he can at any time interrupt the action of the irritant, when, as a rule, the eruption will at once begin to subside" This is quite true, but it is true merely because the irritant is known, if the irritant be overlooked then even Mr Morris will not refuse to call the process "eczematous" As knowledge extends of the etiology of simple catarrhal inflammations of the skin we find more and more of these conditions to be connected with definite external irritants, and though many will always remain as the products of causes acting from within, yet many of the conditions acknowledged by all to be eczematous now will undoubtedly be shown to be associated with the presence of bacteria on the surface of the skin Why, then, should we deny to those cases in which the cause is known the title which we all freely concede to cases where the cause has not been ascertained? We hope that in the next edition the author will no longer distinguish between eczema and traumatic dermatitis For the account of the clinical varieties of eczema we have nothing but praise. The illustrations are good and numerous, it would, perhaps, have been well to indicate in the plates of micro-organisms the magnification employed

We have much pleasure in recommending this new edition as fully up to date and as a very satisfactory exposition of the diseases of the skin within a moderate compass

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Ocular Therapeutics for Physicians and Students By F W MAX OHLEMANN, M D, late Assistant Physician in the Ophthalmological Clinical Institute of the Royal Prussian University of Berlin Translated and edited by CHARLES A OLIVER, A M M D, one of the Ophthalmic Surgeons to the Philadelphia Hospital, U S London H Kimpton 1899 Pp 274 Price 7s 6d net.

THIS work is divided into two parts, the first of which is occupied with an enumeration of the different remedies employed in ophthalmic practice and a description of their action and uses thus enabling the practitioner to select, without hunting through many books, one out of many remedies having the same object in view, whilst the second part specifies the various diseases of the eye without entering into unnecessary details and gives the treatment recommended and practised by the best authorities The doses of the drugs used internally or applied externally are given both on the metric system and in English weights and measures The agents mentioned are considered under the heads of Mechanical Treatment, such as Massage, Thermic Remedies Chemical Agents such as Antiseptics, Astringents Alkaloids Narcotics, and Local Anæsthetics, Electricity and finally General Treatment, which includes Protective Means and Blood letting The introduction of many new remedies into ophthalmic practice has led to formulæ which are rather startling, such, for example, as sodii sozo-iodolicum petrolatum, dermatol, europhen, aristol formaldehyde, ephedrin, and others

Some slips of the pen are noticeable, such as vaselini albæ and lanolini purissæ amylis As might be expected, the diseases of the conjunctiva and of the cornea present the greatest variety of treatment and a large selection of remedies is here offered to the practitioner who, if he be able to diagnose this and other disease, will have little difficulty in finding the appropriate treatment We are glad to see that the merits of chlorine water and of corrosive sublimate are duly recognised as proving of great service in various inflammatory affections of the eye and the short chapter on the application of electricity is good. On the whole however the volume does not appear to offer any striking novelty or to contain any plans of treatment that are not to be found in one of the larger treatises on the diseases of the eye

LIBRARY TABLE

On Villous Growths and the Common Affections of the Rectum By THOMAS BRYANT, M Ch. R.U I. (Hon), F.R.C S Eng, F.R.C S Irel (Hon), President of the Royal Medical and Chirurgical Society of London, Consulting Surgeon to Guy's Hospital, &c Illustrated London The Medical Publishing Company, Limited 1899 Pp 52 Price 3s 6d —These valuable papers on some important diseases of the rectum appeared in THE LANCET in 1897 and we think Mr Bryant has done well in letting them re-appear in book form Villous growths of the rectum are certainly often overlooked and the results of operation for this condition are so good that it is highly desirable that the tumour should be diagnosed as early as possible Mr Bryant's account is clear and is illustrated by the notes of 13 of the cases which he has had under his care. The book also contains a good description of the methods of examining the rectum and of the more common diseases which affect it, such as hæmorrhoids and ulcer There are 25 illustrations, most of which are reproductions of drawings made by the late Mr P Y Gowlland, and as he was a surgeon as well as an artist these are exceptionally accurate and good Anyone who has to treat diseases of the rectum will derive profit from the perusal of this little volume

The Treatment of Lateral Curvature of the Spine, with Appendix, giving an Analysis of 1000 Consecutive Cases treated by Posture and Exercise exclusively (without Mechanical Supports) By BERNARD ROTH, F R C S Eng, Orthopædic Surgeon to the Royal Alexandra Hospital for Sick Children, Brighton, &c Second edition London H K Lewis 1899 Pp 141 Price 10s 6d —This second edition has been entirely re-written and re-arranged In speaking of the first edition in 1889 we expressed the hope that this book would do something to check the unscientific and often disastrous treatment of lateral curvature of the spine by spinal supports and prolonged rest and this new edition is even better calculated to show the good results which may be obtained in lateral curvature by posture and by exercise Not that we would wish to be thought to condemn all mechanical treatment of lateral curvature, for mechanical appliances have in certain cases their uses but it is very easy to over-use them and the average case is far better without them Mr Roth's book is accompanied by an interesting appendix, in which particulars are given of 1000 consecutive cases of lateral curvature which he has treated without mechanical support There are two plates of life-size cyrtometric tracings of cases of lateral curvature and many illustrations have been added. This work will form a useful book for anyone who wishes to know what can be done by judicious treatment in these troublesome cases

T J and J Smith's Professional Appointment Diary London T J Smith and Downes 1899 Price 10s 6d —We only received this diary in April and think it somewhat late in the year for a diary to be sent for review However, we must allow that for a busy man it should be found very convenient Each page comprises a day, divided into half-hours, from 9 A M to 8 30 P M At the beginning of the book are some pages of various information and at the end of the book are other pages ruled as a cash register

Les Verres Isométropes Par le Dr DE BOURGON Paris A. Maloine 1899 Pp 192 Price 5 francs —This work has for its object the introduction into practical work, and especially into the manufacture of spectacle lenses, of a new kind of glass the composition of which is preserved as a secret but which is said to be harder and more homogeneous and transparent and to have a density of 3 170 against about 2 6, which represents that of crown glass, it is also claimed that the index of refraction is more constant We commend the book to the attention of the optician

Red Crystals in a Specimen of Sputum stained for Tubercle Bacilli These closely resembled and were easily mistaken for tubercle bacilli, but it was shown that they were crystals, probably precipitated from the carbol fuchsin —Mr Larkin showed (1) An Exostosis of the size of an orange which had grown from the venter scapulæ close to the vertebral border and just below the level of the spine, and (2) a Large Fibroma of the Skin of the Front of the Thigh —Dr R O Dun (1) A Fibrous Epulis from a lad aged nine years, and (2) Two Phosphatic Vesical Calculi removed from boys aged nine and two and a half years respectively —Dr Abram A Series of Museum Specimens prepared by a modification of Jore's method —Dr John Hay Malignant Pustule of the Neck —Dr Grossmann An Unopened Eyeball in which a foreign body had been localised by an x ray method which he had already described to the institution The eyeball was opened in the presence of members and the body was found at the expected site —Several members discussed the specimens

ÆSCULAPIAN SOCIETY OF LONDON —A meeting of this society was held on April 21st, the President, Mr D H Goodsall, being in the chair —The President showed 1 A man, aged 59 years, who falling on the shoulder Luxated the Acromial End of the Clavicle Upwards Though this happened but nine days previously movement of the arm was good and painless, though the deformity persisted 2 A woman, aged 22 years, with a seven year old Crural Ulcer resulting from injury and not kept up by varicose veins He treated the condition by his usual method, Luke's, and after a few days' treatment there was improvement in the edges which were hard and thick and the base was now red and filling up Mr Goodsall had had no failure by this method —Dr B G Morison showed a woman, aged 21 years, with a Large Scar in the Posterior Triangle resulting from Suppurative Adenitis, who when this was healing developed tuberculous suppurating foci in the skin of the legs about the calves These were treated satisfactorily by incision and local applications of iodoform, cupric sulphate, and creasote ointment There was a family history of tuberculosis —Mr W Campbell M'Donnell read notes on a case of Poisoning by 7 5 cubic centimetres of Oil of Bitter Almonds in a woman, aged 28 years, who was found on the floor unconscious, constantly moaning, cold, cyanosed, foaming at the mouth, and breathing quickly Her breath smelt strongly of bitter almonds, her pulse was 96 per minute, her pupils were large and insensitive, there was absence of conjunctival reflex, her head and eyes were fixed to the left, the jaws were fixed, there was inability to swallow, all segments of all limbs were somewhat rigid, and there was slight retching at frequent intervals After two hypodermic injections of solution of strychnia B P at 10 minutes interval, the pupils became smaller and sensitive, and the conjunctival reflex was detected About four hours later she vomited and in 12 hours the cyanosis passed, recovery following

BIRKENHEAD MEDICAL SOCIETY —A meeting of this society was held on April 7th, Mr S H Nazeby Harrington, President, being in the chair —Mr R T Hughes read notes on a case of Peritonitis with Obstruction — Dr Owen Morris gave some After notes on a Case for Diagnosis which he had shown at a previous meeting — A paper was read by Mr H L Pearson on Sewer Venting and Sewer Ventilation He pointed out that the escape of abominable smells into the roadway from sewers was a disagreeable nuisance, but when it became a question whether such a nuisance was a nuisance dangerous to health sanitary experts did not all stand upon the same ground After quoting the opinions of several distinguished medical officers of health who were in favour of continuing the existing method of ventilating sewers by means of open grids in the roadway Mr Pearson gave instances of several cases of illness occurring in his own experience which were distinctly traceable to emanations arising from sewers opened for purposes of repair In conclusion Mr Pearson strongly advocated the closing of all road grids, making it imperative at the same time that every soil pipe should be fitted with a ventilating shaft of its own diameter He would give up the idea of ventilating the sewer—that is to say, of trying to make the air in the sewer sweet—for he held the opinion that the proper place for sewer air was the sewer itself He would abolish the word "ventilate" altogether and only deal with sewer venting —Dr Marsden, Dr Morris, and Dr Pinkerton criticised the paper

Reviews and Notices of Books.

Diseases of the Skin an Outline of the Principles and Practice of Dermatology By MALCOLM MORRIS, F R C.S. Edin, Surgeon to the Skin Department St Mary's Hospital, London, &c With 10 Coloured Plates and 38 Engravings New and Revised Edition London, Paris New York, and Melbourne Cassell and Company 1898. Pp 589 Price 10*s*

EVER since its first appearance in 1893 Mr Malcolm Morris's "Diseases of the Skin" has been universally recognised as the most concise and most readable of all the treatises on dermatology in the English language and this recognition has been accorded to it, not only by students and others desirous of studying the subject, but by dermatologists The style is clear and the descriptions are amply sufficient for all ordinary purposes without being needlessly long A very great feature is made of the sections on treatment and this portion of the work is especially good, and that is as it should be, for works on diseases of the skin are in more request for suggestions for treatment than for diagnosis We notice in this edition that the account of the treatment of each disease immediately follows the account of the disease this is a decided improvement and should prove of much convenience to the reader To mention in the first place the changes which have been made for this edition we find on examination that the whole work has been thoroughly revised and that there are very few portions of the book which have not undergone some modification It is probable that the chapter dealing with ringworm has been more altered than any other, for the changes which have taken place in our views with regard to this disease, or rather group of diseases have been very great during the few years which have elapsed since the last edition appeared. This is a somewhat difficult subject to explain clearly to those who have been educated in the views which formerly prevailed and we examined with some curiosity to see how the author had acquitted himself of this task We can say unhesitatingly that Mr Morris has been successful and we would suggest a perusal of this chapter to all who have not yet formed clear ideas of the present state of knowledge of this complex subject. A good account is given of the methods of examining and staining affected hairs and we endorse fully the author's remarks that the use of a caustic alkali in the preparation of the hair for examination does not lead to the best results

The classification of the diseases of the skin which Mr. Morris has adopted is based on etiology and this is undoubtedly the true basis At present, however, our knowledge of the causes of many morbid conditions of the skin is too incomplete to enable us to make an exact classification and the author has acted wisely in not attempting to force some diseases such as psoriasis, about the essential causes of which we know little or nothing, into any position which might ultimately prove quite unsuited for it

Of only one of the definitions in the book do we feel it necessary to express our disapproval The word "eczema" has at different times had various significations and Mr Morris tells us that he uses the term in this book as "connoting a catarrhal inflammation of the skin originating without external irritation and characterised in some stage of its evolution by serous exudation" The only words of this definition with which we cannot agree are the four words, "originating without external irritation" There was a time indeed when the eczematous process was considered to be a pathological condition quite apart from anything which could be produced artificially, but we know now that the whole of the pathological process is identical in the two

THE LANCET.

LONDON SATURDAY, APRIL 29, 1899

WE have been favoured with a copy of the Midwives Bill of the British Medical Association in its perfected form The essential points of the Bill have been already given to the profession and, indeed, we have previously presented them with some comments to our readers[1] It will not be amiss, however again briefly to notice the principal provisions of the Bill as contrasted with those of the Midwives Bill now before Parliament—provisions which in the opinion of the Council of the British Medical Association justify them in putting forward a distinct measure of their own Both Bills propose to give a licence to midwives authorising them to attend ordinary cases of labour, both provide a Central Midwives Board which has to frame regulations for the training and education of midwives, both provide that henceforth women practising as midwives for gain without a licence shall be liable to a fine, both provide that the licence or certificate enabling a woman to practise as a midwife shall be obtained locally from the local supervising authority of the district in which she intends to practice and shall be renewable annually, both provide that the local supervising authority shall exercise certain supervisory and disciplinary powers over the midwives of its district subject to the authority of the Midwives Board Finally, both stipulate that the midwives' licence shall confer no medical status or title or any right to grant certificates of death or stillbirth or any medical certificate

Such, speaking roughly, are the provisions in common of the two Bills We now proceed to set out the chief points in the Bill of the British Medical Association which differentiate it from the Bill now before Parliament

First, under the head of Licensing, the third section of the Bill provides not only that no woman shall be entitled to use the title of midwife or to habitually and for gain attend women in childbirth without a licence, but that the employment by a licensed midwife, as a substitute at any childbirth, of a person not licensed under the Act (that is, the employment of any unqualified assistant) shall be an offence punishable by a fine not exceeding £5 This is a very valuable and proper provision

Secondly, the Bill of the Association has a very differently constituted Board from that of the Midwives Bill The Parliamentary Bills Committee in their first efforts produced too unwieldy a Board In this Bill the Board is delightfully small, consisting only of seven persons—six to be "selected by the General Medical Council and one to be appointed by the Lord President of the Privy Council—all to be registered medical practitioners The subtle compliment to the General Medical Council of giving it the duty of selecting six sevenths of the board will doubtless be appreciated by that body, though it may be differently regarded by the advocates of direct representation. We approve of distributing the representation among the different districts of the country, though we scarcely see how the General Medical Council could pretend to know the fittest practitioners to be "selected" even if it had not repeatedly announced its unwillingness to do more than initiate the proceedings and generally to supervise the regulations of the board Another point requiring reconsideration is the wisdom of allowing a term of only two years to the members of the board We see that they are eligible for re-election, but two years is too short a time to give members a sense of interest or any education in their work

Sub-section 6 of Section 6, dealing with the Board, enacts that no member of the Board shall act as teacher, instructor, or examiner of midwives, and no member of the Board shall, take any part in any inquiry respecting the conduct of any midwife to whom he or she has acted as teacher or instructor This is rather hard on teachers and examiners and, it seems to us, may deprive the board of the services of many gentlemen who could give good help in such work Much power is properly given to the local supervising authority, consisting of "not less than three registered medical practitioners, not teachers nor examiners of midwives" They are to be appointed by the county council of any administrative county or county borough and have power to suspend for misconduct, or for the prevention of the spread of infection, any midwife s certificate The Bill of the British Medical Association omits one duty contemplated by the General Medical Council as devolving on the local supervising authority—namely, that "of making due provision whereby midwives may receive promptly the assistance of a registered medical practitioner in all cases of abnormality or difficulty as respects either the mother or child" Section 18 provides very properly for the control and supervision of lying in homes kept by midwives and for the keeping of records of cases by them by providing that both the homes and the records should be open to inspection The power of inspection is assigned to the Central Board. Should it not rather be given to the local supervising authority? It is sanguine to expect much supervision of such houses from a central board, whereas a supervising authority is on the spot

Such are the chief points in this Bill of the British Medical Association Some of them are obviously in the right direction and we should like to see them adopted Others are a little doubtful In any case we scarcely see the propriety of constructing a second and what must seem a rival Bill, and we think that the really important points of difference should be raised as amendments There is ample time for considering this suggestion as it is fairly obvious that the chance of any legislation on the matter in the present year is very improbable

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AT the annual dinner of the Press Club on April 22nd Mr CHAPLIN showed a great and natural anxiety to bring about a more sympathetic attitude on the part of the fourth estate to the Government vaccination policy—if, indeed, the word policy can be applied to the vacillating and drifting course which characterised the passage of his year's Bill

[1] THE LANCET Feb. 18th, 1899

JOURNALS

The Journal of Anatomy and Physiology Conducted by Professor Sir WILLIAM TURNER, F R S, Professor D J CUNNINGHAM, F R S, G S HUNTINGTON, M D, Professor A MACALISTER, F R S, and Professor J G MCKENDRICK, F R S Vol XXXIII New Series Vol XIII, Part 3 April, 1899 London Charles Griffin and Co Price 6s —The first article in this number is by Professor Arthur Thomson, on the Sexual Differences of the Fœtal Pelvis, with two plates, and he has satisfied himself that, as Fehling stated some time ago, the differences in form and appearance are such as to enable the observer to discriminate between the pelvis of the male and that of the female as early as the third month of fœtal life The article is devoted to a description of these points 2 Mr B H Buxton, photographs of a series of Sections of an Early Human Embryo, with eleven plates, each containing four figures 3 Dr Bishop Harman, the Pelvic Splanchnic Nerves, an examination into their range and character, with 13 plates The number of fibres in each root and their distribution are given in much detail 4 Dr Frederick Craven Moore, Demonstrator and Assistant Lecturer on Pathology, Owens College, Manchester, Unilateral Renal Aplasia or Unsymmetrical Kidney 5 Dr Robert J Terry, Demonstrator of Anatomy in the Missouri College of St Louis, U S A, Rudimentary Clavicles and other Abnormalities of the Skeleton of a White Woman In addition to the above the alveolar processes were absent in both jaws The skull presented some unusual features both as to form and sutures The coccyx consisted of four several bones 6 Dr Peter Thompson, Senior Demonstrator of Anatomy in Owens College, Manchester, on the Levator Ani or Ischio-anal Muscle of Ungulates, with special reference to its Morphology 7 Dr Byron Robinson, Professor in the Chicago Post-graduate School of Gynæcology and Abdominal Surgery, on the Morphology of the Mesenterial Development of the Vertebrate Digestive Tract, an article giving the results of much research both on the human subject and on animals 8 Dr S A. Francis Dixon, B A., the Sensory Distribution of the Facial Nerve in Man The facial nerve is here shown to consist of a motor and of an afferent portion, the latter part consists of the chorda tympani and the great superficial petrosal nerves, both these nerves are probably composed of taste fibres and are distributed to structures developed in connexion with the wall of the anterior portion of the pharynx 9 An unsigned article on Poupart's Ligament, under the title of Archæologia Anatomica 10 An article, also unsigned, entitled Anatomical Notes and Queries 11 Professor Bertram Windle, D Sc, M D Dub, supplies a report on Recent Teratological Literature The last two articles are devoted to the Proceedings of the Anatomical Societies of America and Great Britain and Ireland

Caledonian Medical Journal —The April number completes the third volume of this journal The principal article is on Pain in Visceral Disease, by Dr J S Warrack of Aberdeen University Dr J O Simpson of Cambridge describes the cases of a husband and wife affected with lead poisoning The wife suffered severely from 1877 to 1893, the lead colic being diagnosed as obstruction from malignant disease, but she recovered perfectly under treatment The well in the garden communicated with the house by a leaden pipe which was thickly encrusted

Mercy and Truth —Two of the contributions to the April number describe incidents of hospital work, one is by Dr P S Sturrock of Baghdad and the other by Mr E G Horder of Pakhoi, South China

Monist —Professor Giuseppe Sergi of Rome argues in the April number that the primitive inhabitants of Europe were of three successive types The original stock was of the Neanderthal species and this was succeeded by an immigration of a new type from Africa, which he therefore calls Eurafrican In his classification he makes the colour of the skin quite secondary in comparison with the peculiarities of the skeleton and he recognises in the Eurafrican type three distinct races—namely, (1) African races such as the Abyssinians, not including negroes, (2) the Mediterranean race, and (3) the blonde type with blue eyes, known to-day as the Germanic The Eurafrican type was succeeded by the Asiatic invasion which has been called "Indo European" and was believed to be the bearer of civilisation

Archives Générales de Médecine —The original articles in the April number are on the Clinical Significance of Alimentary Glycosuria, by Dr Linossier, on a case of Hypertrophic Ileo-cæcal Tuberculosis, by Dr G Caussade and Dr Charrier, and the concluding portion of Dr Leredde's articles on the Relation of the Nervous System to Diseases of the Skin

New Inventions.

A PNEUMATIC PRESSURE PREVENTING PAD FOR CYCLISTS

THIS pad consists of two annular indiarubber air cushions connected to one another by a flat indiarubber band containing a sort of pouch which can be filled with antiseptic wool The external diameter of the larger cushion is about five inches and that of the other about three and a half inches, the central aperture of each is about one and a quarter inches The connecting band is three and three-quarter inches long and about two inches wide The air-cushions are not in communication with one another internally, but each has its own vulcanite tap and is inflated separately, so that the resistance can be regulated to individual requirements The pad is primarily intended for female cyclists and is not attached to the saddle, but is worn beneath the clothing It fits comfortably to the body, does not betray its presence by causing any fulness and does not inconvenience the wearer when walking It can be washed if necessary and has a removeable covering made of any thin woollen material The pad has received the name of "The Komphy," and it is claimed for it that it prevents the ill effects of pressure on the perineum or from the saddle peak and makes the hardest of saddles comfortable For women of middle age, and especially those who have lost flesh below the waist, this is no doubt of great importance The pouch filled with wool is a valuable contrivance, giving support and protection just where it is most needed The ordinary pattern has a waist-belt, to which it is fastened by broad tapes in front and behind, but those who for any reason object to the waistbelt can suspend the pad from a patent corset attachment which screws into the corset The price of the pad is 7s 6d and it may be obtained from Barclay and Sons, 95, Farringdon street, E C

AN ARTIFICIAL MASTICATOR

WITH Carrier's artificial masticator meat may be cut up on a plate as with an ordinary table knife Very little practice is required in order to be able to manage it properly, and it does not in any way interfere with the usual table arrangements It somewhat resembles a pair of strong hinged forceps or pliers, the points, however, are not flat but each of them is divided into three blades The action, in fact, is that of a pair of six bladed scissors It is not apt to get out of order, does not require sharpening, can be readily taken to pieces for the purpose of cleansing, and can be easily carried in the pocket in a soft leather case with which it is provided The total length of the masticator is seven inches It has the advantage of not in any way impairing the flavour of the food and is intended specially for mincing the food of children and elderly persons Messrs Maw, Son, and Thompson Aldersgate street, E C are the sole agents for the United Kingdom

This was attended to by the house surgeon at Stockport Infirmary and he returned home the same night and was treated by Mr Gunn The limb would appear to have been examined at regular intervals but union apparently has not taken place A want of bony union surely cannot be the fault of the surgeon but rather of the constitution of the patient. The plaintiff's case received medical support For the defendant Mr W G S Nickerson, formerly assistant house surgeon at the Stockport Infirmary, now a lieutenant in the Royal Army Medical Corps at Portsmouth, stated that he put up Kite's fracture and that it was a badly splintered fracture He stated that he got the bones straight, but that owing to the splinters the position of the shaft was unsatisfactory He then formed the opinion that the fracture, which "was the worst fracture of the forearm he had ever seen," would have a bad result, either from the faulty union or excessive callus Mr W Thorburn of Manchester said that with a fracture of this description, taking patients of average health, there was a considerable risk of incomplete union He said that when he was a medical student the standard teaching was to amputate at once in such cases and he saw no evidence of negligence in what Mr Gunn had done He would not like to say that he could have done better Mr Walter Whitehead of Manchester gave similar testimony and said that the state of things which was shown in Kite's case was very likely to come about even with the best of treatment The jury gave a verdict for the defendant without hearing his counsel but his success in legally vindicating his professional character and ability is but a poor reparation for the anxiety and expense which he must have undergone

THE SALE OF FOOD AND DRUGS BILL

As will be seen from our Parliamentary intelligence in this issue the Standing Committee on Trade of the House of Commons began their work in earnest last week in regard to the consideration of the Sale of Food and Drugs Bill which was introduced by Mr Long into the House of Commons six weeks ago In view of the great number of amendments which several prominent Members have announced their intention of moving the labours of this Committee are not likely to be finished at a very early date Already, however, certain important points have been considered and certain amendments have accordingly been ordered to stand as part of the Bill The artificial colouring of margarine so as to imitate butter is not to be prohibited The suggestion that the words 'indelibly branded' should be inserted in Clause 1 before the words 'margarine cheese" was withdrawn Adulterated or impoverished cream is, however, proposed to be placed under the provisions of this clause although many other articles of food were apparently ignored, a point which was raised by Sir Charles Cameron, and Mr Kearley Our opinion, therefore, is confirmed—namely, that the Bill introduced by Mr Long seems to be narrowing down the question to agricultural products without reference to the representations on the wider subject of food adulteration in general which were urged more than a year ago by the Select Committee An important amendment which we are glad to see was carried was moved by Sir Charles Cameron to the effect that the Local Government Board should have power to act in the administration of certain matters within the province of the Sale of Food and Drugs Bill which decidedly have a bearing upon public health But the most important announcement which Mr Walter Long made in Committee was that relating to the use of boric acid and preservatives in food He stated that scientific opinion was not applied to the use of certain preservatives under certain restrictions The question is one about which we have maintained again and again that some definite pronouncement from the Government was needed, so that we welcome the statement that the President of the Local Government Board has decided to appoint at once an expert committee to inquire into the whole question of preservatives, their use, and how far such use is injurious to health It is impossible to deal adequately and *seriatim* with the issues raised in the proceedings of the Committee We must postpone therefore a general criticism of the suggested amendments until they are embodied in the final report of the Committee which, as we have already said, may be expected to sit during a somewhat protracted time considering the contentious nature and the great number of the points with which they have to deal

THE SERVICES OF THE GENERAL PRACTITIONER AND JURIES

MR. EDWARD BALL, L R C P & S Edin L F P S Glasg, has had to vindicate in the Southport County court his charges for attendance on the late Mr Thomas Platt The bill amounted to £53 9*s* 6*d* for medical and surgical attendance, medicine, &c The attendance involved frequent visits, often in the night and at other inconvenient hours, also, it would seem, catheterism For the latter operation the usual charge was 10*s* 6*d* Ordinarily Mr Ball charged 3*s* 6*d* or 5*s* for visits But when, as was the case from August 3rd to September 7th, the case had become critical and required prolonged visits at all hours of the day and night he charged 7*s* 6*d* in the day time, 10*s* 6*d* between 8 and 11, and one guinea for visits in the night He charged also for medicines He insisted that the rent of the house—£28—had nothing to do with the matter, the patient being a man of means and without family But the executors objected and compelled Mr Ball to seek redress in the County court Dr William Alexander of Liverpool and Dr Percy Ashworth of Southport both thought the charges moderate The jury granted the full amount claimed And very rightly so They appreciated the facts and gave a right verdict

LAMP EXPLOSIONS IN MANCHESTER AND SALFORD

AT a recent meeting of the committee of the Manchester and Salford Sanitary Association held on April 12th, Dr Leech presiding, Mr William Thomson, F C S, presented a complete report on the lamps which have exploded in Manchester and Salford and the oils used. He began about the end of 1895 to study the burners of the lamps in which explosions were said to have occurred He was aided in this by the police who were allowed to take the burners to him. Towards the close of 1897 the Sanitary Association requested that samples of the oil used should be obtained, which was accomplished also with the aid of the police Up to the present time 40 burners and 15 samples of the oil used with them have been examined Of the burners 31 bore no particular trade-mark and "all the serious explosions heard of investigated had been produced in lamps having reservoirs The oil in such lamps would not reach such a high temperature as those in metal reservoirs and the danger of thus obtaining the mixture of oil vapour and air (41 volumes to 50) to cause the maximum of violence would probably be greater than in metal whether when the proportion of oil vapour to air would be much greater Mr Thomson's conclusion was that under any condition the danger of explosions with metal reservoirs was 'infinitely small as compared with that of glass or other fragile reservoirs Of the lamps elaborated were of the American low flash type and now, laid very

Bill makes no pretension to do, and unless it is amended in its passage through Parliament it is probable that London will remain for a number of years deprived of much of the useful service which its central health department could render When the Local Government Act of 1888 was passed it was perhaps a wise course to leave the county health officer without duties which were very clearly defined That there was ample work for such an officer no one familiar with health administration has doubted, but it has remained for the officers first appointed to show how their services may be best employed In London the position shaped itself very quickly, the medical officer of health of the county had immediately important duties under the Housing of the Working Classes Act and these duties were in 1891 largely added to by the powers conferred upon the London County Council under the Public Health (London) Act That the County Council has thus been able to render great services to London there is no possible doubt

The question which needs consideration now is —what should be the position of the County Council in the future in relation to the health administration of London? This, we think, should have been determined by the present Bill, but it gives no such indication of the intentions of the Government Beyond providing the Council with an unsatisfactory method of exercising, when a sanitary authority is in default, certain powers, which it has itself hitherto exercised to the public advantage irrespectively of failure on the part of the sanitary authority, its position is practically the same as before It is, however, possible to obtain some insight into the views of the Council on this matter and also into the views of its chief health officer, with regard to the former through amendments to the Bill of which notice has been given, with regard to the latter by a paper which has been prepared by the medical officer of health of London and which the County Council has printed We may summarise the latter document by stating that it shows reason for linking together the several administrations of London in such a way as to create a really effective machine for the prevention of disease Mr SHIRLEY MURPHY has an easy task in showing the great disadvantage from which London suffers owing to the severance of the administrations for notification of infectious disease and for hospital provision from the administration of the central metropolitan health authority For this we believe that there is only one remedy and that, as we have before stated, is that these two administrations should be combined It is, indeed, difficult to explain why the Government have not recognised the necessity of this change and have not provided for it in their present Bill

A further proposal is, we find, that the medical officers of health of London districts should be county officers and thus linked with the central as well as the district authorities This question was much discussed in 1888 when the Local Government Bill of that year was before Parliament and the proposal received the approval of the Council of the Society of Medical Officers of Health and of the British Medical Association who, indeed, took active steps to secure its adoption In this they were partially successful, for the Local Government Act does give opportunity for County Councils to appoint the medical officers of health of districts in other counties than London The provision in this Act as it at present stands is, however, not adapted to London circumstances, and a more complete and satisfactory adjustment is needed to meet the special conditions of the metropolis We should be glad to see some such course adopted, for we are satisfied that the more intimately the County Council is associated with the district health administration of London the more effective it will be From the point of view of the district medical officer of health there is nothing to object to in this suggestion, for it would add to the dignity of his office and, we hope, to his influence with the district authority Whether the subject will come in any precise form before Parliament we do not know, but in our view unless the Bill be amended in the sense we have indicated a fine opportunity for improving the health administration of the metropolis will be lost

Annotations.

"Ne quid nimis."

THE PROGNOSIS OF COMPOUND FRACTURES

BEFORE the days of antiseptic surgery cases of compound fracture of the limbs usually ended in a sacrifice of the limb, either primarily so as to prevent the risk of the patient being subjected to pyæmia, erysipelas, or prolonged suppuration or by a subsequent amputation Since the use of antiseptics a limb is rarely removed by primary amputation unless the bones are so comminuted, the main vessels torn, or the tendons and muscular structures so damaged that repair is beyond consideration This situation appears to us to offer certain unfortunate opportunities If after a surgeon has done his best to save the limb an unfavourable union is the result he now runs the risk of being blamed for causing the very infirmities which he has done his best according to modern teaching and experience to avoid It is to be regretted that medical men can be found to support such actions, if it were not for this these actions could not arise Any surgeon of even limited experience knows how difficult it is to form an accurate prognosis in cases of compound fracture. In some cases the fragment can be readily got into favourable apposition and the outside wound can be easily cleaned while the destruction of the soft parts turns out to be not so great as at first appeared. Then, and perhaps aided by the patient's vitality and robust health, progress is favourable and very little deformity is left On the other hand, the fracture may be comminuted and the bone split in a longitudinal direction, or the fracture may be oblique and the two ends impossible to get into apposition, while the patient's general health may be such that complications ensue even under the most intelligent treatment As we have said, the prognosis in cases of compound fracture is uncertain A faulty union may occur or much deformity may result from a superabundance of callus despite all precautions, then although the limb has been saved it may be nearly useless for a very long period or even permanently—a result which is all the more disappointing to the patient in that he has hoped so much from the conservative treatment At the recent Manchester Assizes an action for damages was tried before Mr Justice Bigham and a special jury Mr Richard Gunn, a surgeon of Droylsden, was sued by a man named Kite who had acted for him as groom The groom was driving home when the horse stumbled and he was thrown out receiving a compound fracture of the right arm

general hypertrophy of the subcutaneous tissues, but the bones as revealed by a skiagram showed no enlargement There was some hypertrophy of the nose and lower jaw, the alæ nasi being especially thickened, while the lips, particularly the lower one, also showed some hypertrophy The tongue and tonsils were enlarged somewhat and the voice became guttural and metallic The spine became kyphotic in the cervical region, the clavicles, ribs, and sternum were hypertrophied, there was lordosis of the lumbar spine with a pendulous abdomen, while the perspiration was profuse and of disagreeable odour Her appetite was good and she would take more than an average quantity of nitrogenous food The urine presented a persistent and excessive deposit of phosphates. The menstruation, which for some months had been irregular, now ceased and she developed lowness of spirits and irritability of temper There was a constant feeling of lassitude and drowsiness and the original delusions regarding gas were gradually replaced by delusions regarding electricity She felt pains all over her body like the pricking of needles and these she attributed to invisible enemies Finally, she developed delusions of grandeur Suspecting acromegaly the patient was put under treatment with pituitary extract The first effect was a severe onset of metrorrhagia accompanied by hæmorrhage from the bowel. This passed off in a few days and she then began to improve physically and mentally Her weight, which had increased before, now returned to a normal amount and menstruation returned and was maintained at regular intervals The very prompt and favourable response to the administration of pituitary extract indicated that the treatment adopted was correct, and it was accordingly continued with evident benefit to the patient The above case is the first one recorded in this country of what may be termed "acromegalic insanity," a condition comparable to myxœdematous insanity, in which thyroid treatment has been proved to be of benefit both physically and mentally The success of the present case is so far encouraging as to indicate a similar mode of treatment for analogous cases in the future

A FORM OF SPASMODIC PARAPLEGIA SECONDARY TO AN ORGANIC LESION AND WITHOUT DEGENERATION OF THE PYRAMIDAL TRACTS

AT the meeting of the Société Médicale des Hôpitaux of March 24th M Babinski read a paper on this form of paraplegia, of which he had observed three cases There was no degeneration of the pyramidal tracts in any case In one the lesion was a small sarcoma developed in the choroid plexus on the right side, and it compressed the medulla, pons, the middle peduncle of the cerebellum, and the cerebellum Even near the tumour there was no degeneration of nerve fibres The symptoms were headache, vertigo, optic neuritis, mental disorders, contracture of the upper limbs, with flexion of the fingers, and the form of paraplegia to be described. The tendon reflexes were not at any period exaggerated In another case the upper dorsal spinal cord was compressed by a sarcoma of the dura mater At this level there was marked sclerosis and the myelin of most of the fibres had disappeared, but above and below there was no trace of secondary degeneration There were incontinence of urine and fæces, sacral bed sores epileptoid tremors, and that modification of the plantar reflex which M Babinski has described as the 'phenomenon of the toes' [1] In the third case there were a few patches of multilocular sclerosis of the cord As in the preceding case the tendon reflexes were exaggerated and the phenomenon of the toes was observed The first case showed that very intense contracture of the limbs of organic origin may exist without exaggeration of reflexes at any period and without epileptoid tremor, that an intracranial lesion may produce not only in the child but in the adult permanent spasmodic paraplegia without secondary degeneration of the pyramidal tracts, and that the contracture may attain an exceptional degree of intensity The three cases showed very intense contracture of the lower limbs in the form of marked and permanent flexion of the thighs on the pelvis and of the legs on the thighs, accompanied by pains which occurred principally when an attempt to correct the vicious attitude was made and by spasms also most marked when this attempt was made The contracture appeared to be due to irritation of the pyramidal system. M Babinski concluded that not only was the form of spasmodic paraplegia independent of degeneration of the pyramidal tracts, but it indicated that these tracts were normal or at least but little altered

[1] THE LANCET, Sept. 17th, 1898, p. 765.

THE LATE DR JOSEPH O DWYER

A COMMITTEE of more than 40 physicians, representing 16 different medical societies of the city of New York and including representatives of both schools of medicine, has been formed for the purpose of doing honour to the memory of Dr Joseph O Dwyer The first meeting was held at the New York Academy of Medicine on Nov 22nd, 1898, under the chairmanship of Dr J D Bryant and was mainly devoted to organisation Dr George F Shrady was elected permanent chairman and Dr Alfred Meyer permanent secretary, and the following committee on scope and plan were appointed Dr Dillon Brown (chairman), Dr Robert Abbe, Dr R G Freeman, Dr L Emmet Holt, and Dr Louis Fischer At the second meeting held at the Academy of Medicine on March 13th, 1899, the report of the committee on scope and plan was adopted and now only awaits final action of a meeting of the full committee The memorial to Dr O Dwyer will probably take an educational form, for by the plan now outlined it is proposed to raise a fund of $30,000 the interest of which would support two O Dwyer Fellowships in Pædiatrics open to competition by physicians who are graduates of the United States and to be held by the successful competitors for a period of two years During that period they must furnish satisfactory proof of their engagement in original research work to a committee of five, one of whom shall be appointed by the President of Harvard University, one by the Dean of the Johns Hopkins Medical School, one by the Provost of the University of Pennsylvania, one by the President of the University of Chicago, and one by the President of the New York Academy of Medicine Many details of this general plan are still to be arranged, the committee however, are anxious that it should be known throughout the profession that a movement of this nature is on foot and that an effort will be made to give to it an international character

PUBLIC HEALTH OF MALTA

IN the report of the Public Health Department of Malta for the year 1898 it is estimated that on Jan 1st, 1898, the population of the islands of Malta and Gozo was 159,998 and 20,330 respectively, making a total of 180,328 The number of births in the two islands in 1898 was 6932 and the number of deaths was 4648, so that the birth rate was 38 4 per 1000 and the death rate was 25 8 per 1000 The death rate over five years per 1000 of the population at that age was only 14 3 but the death rate below five years to 1000 living at that age was 108 3 The percentage of deaths under five years to total deaths was 51 3 Prefixed to the tables from which these figures are taken is the announcement that "in the following returns stillborn, deaths on board ships and in the garrison are not included The families of the military,

stringent limitations upon the benefit conferred by the Act upon institutions formed for the promotion of science One very distinguished judge thought that because a member of the institution made "a very good bargain for himself in becoming a member" that consideration ought to be decisive, and that the real object of the society, discernible underneath all its zeal for scientific advance, was the professional advancement of its members Fortunately for the Institution of Civil Engineers the House of Lords was not captivated by this argument Adopting a broad construction of the word "science" it held that applied science no less than the pure sciences fell within its meaning and sustained the claim of the institution to exemption in spite of the professional eminence and social success of its members The Royal College of Surgeons is less fortunate in its present situation As matters stand it holds part of its property for public purposes and the promotion of science on the museum footing and another part for private purposes and the enjoyment by its members of the amenities of life and various opportunities of professional advancement upon the library footing This strikes us as being perilously near to judicial trifling and if it stood entirely alone it would be amusing in its way But it is not pleasant enough to be thoroughly amusing to see the provision which Parliament has made for the encouragement of the pursuit of science frittered away by elaborate refinements such as these

NUCLEUS FOR THE DIAPHRAGM

IN a recent number of the *Journal Médical de Bruxelles* Fritz Sano gives first of all a short *résumé* of the literature dealing with this subject and especially of the work of Otto Kaiser who as a result of researches in comparative anatomy concluded that the nucleus for the diaphragm extends from the third to the fifth or sixth cervical segment, between the nuclei on the one hand of the muscles of the back and the nucleus accessorius on the other, and that the posterior median group of cells furnishes fibres to the phrenic nerve Further, a case related by Collins seems to indicate that the nucleus of the phrenic in man lies in the lower part of the third cervical segment The writer of this paper cut the phrenic nerve in a cat aged three months and examined the cord by Nissl's method The result of the examination indicated that the phrenic nucleus occupies the central part of the anterior horn and reaches from the third to the middle of the sixth cervical segment The cells of the sensory neurons which are in relation to the diaphragm lie in the spinal ganglia of the third to the sixth cervical nerves and the sympathetic fibres come from the middle and inferior cervical ganglia and in part also from the first thoracic ganglion

SOME OBSCURE CASES OF FOOD POISONING

A DANGER to which at times the community is exposed and for which in some instances it is difficult to suggest a remedy is well exemplified in some cases of food poisoning reported to the Local Government Board by the medical officer of health of the borough of Crewe The *fons et origo mali* appears to have been in each instance pressed pigs' cheek which was obtained at a pork butcher's shop There was nothing in regard to the taste and appearance of the cheek which could arouse suspicion and one consumer even stated that it "tasted splendid" Further, there is no reason for thinking that the other articles of food partaken with it, such as tea, milk, sugar, bread, mustard, and salt could have produced toxic symptoms The symptoms were chiefly intense abdominal pain, retching, and purging In some instances sleepiness was a marked symptom as was also dizziness It is clear that a portion only of the food was infective, since but a few of those who partook of the food were poisoned in the manner indicated Unfortunately it was impossible to secure any portion of the food or even any vomited matters or dejecta for examination The cellar where the food was kept was apparently free from reproach, an inspection satisfying the medical officer of health that in this place there were no visible agencies of infection The conclusion appears to be that ptomaines or the chemical products of bacterial action were the cause of the mischief The case affords another lesson in connexion with our remarks last week on the steps which the Government should take to prevent meat extracts being made from filthy substances such as putrid livers and other offal

MEDICAL PRACTICE AND SANITATION IN CUBA

A CUBAN medical journal, *Archivos de la Policlinica*, complains that though in the time of the Spanish *régime* no person was allowed to practise medicine without a Havana diploma or a foreign one which had been confirmed by the local medical authority, yet since the Americans had taken possession of the island numbers of persons were known to be practising medicine whose claim to be qualified to do so had never been submitted to any examination The *Archivos* thinks it very hard that this should be allowed to go on while Cuban medical graduates are not allowed to practise in foreign countries without undergoing examinations conducted in the language of the place. The chief of police has ordered the immediate closure of all brothels situated in hotels, taverns, or cafés The *Archivos* expresses much gratification with the quantity, the quality, and, above all, with the promptitude of the relief distributed amongst the poor Had time been wasted in inquiring about doubtful applicants many might have died. One consignment of relief stores mentioned consisted of 600 grammes of opium, 61,000 quinine pills, and 127,000 rations of bread The American authorities have employed large numbers of persons in cleansing the streets of Havana which are at last beginning to look a little like those of a decent American town

ACROMEGALY WITH SERIOUS MENTAL SYMPTOMS

IN the current number of the *Journal of Mental Science* (April, 1899) Dr David Blair of Lancaster County Asylum records a very interesting case Since Pierre Marie (1886) noted it and gave an adequate description of this disease it has been universally recognised and, though a rare affection, more than 200 cases have been reported The following case, besides being typical, has the additional interest of presenting mental symptoms which proved so serious that the patient ultimately became insane A married woman, the mother of four children, had occasion to have some of her teeth extracted under nitrous oxide gas One month later she began to exhibit delusions. She persistently complained of a gas pervading the house and suffocating her, and this she attributed to certain people who were believed by her to have caused it to enter her house So much was she annoyed by the smell that she would constantly get out of bed at night to search for the source of the gas She eventually became insane and was removed to the County Lunatic Asylum There she continued to speak of the gas which she said she continually smelt on the premises She would weep and groan at times, and cover her face with her apron to keep away the gas She also suffered constantly from headache The speech was slow, the pulse was 72, and the respirations were 16 Gradually it was noticed that her face became puffy, while the hands and feet grew large, soft, swollen, and spade like in form, suggesting the appearance of myxœdema There was a

Indian Medical Service, as special lecturer on tropical diseases Major Ross's lectures will be illustrated by lantern slides and diagrams with reference to the cases in the tropical diseases ward. Dr Annett will devote his whole time to the subject of pathology and will teach both in the ward laboratory and in the Thompson Yates laboratory in University College Four courses of lectures or two months each will be delivered to qualified men each year The number of malarial cases treated in Liverpool in 1898 amounted to 294 In the previous year, as noted in THE LANCET of March 18th, there were 242 cases of malaria, 14 of beri beri, 30 of dysentery, and 39 of tropical anæmia. With the means of instruction in the varied forms of tropical diseases thus afforded there ought to be no need for Liverpool students to proceed to London to obtain that which is ready to hand at their own doors It may be safe to say that if the new school in Liverpool maintains the energy which has characterised its initiation the requisite recognition by the Colonial Office can only be a matter of a very short space of time At least the London School of Tropical Diseases cannot claim priority of foundation

The proceedings of the inauguration commenced by the opening of the new ward in the Royal Southern Hospital, to be called the "Samuel Henry Thompson Ward" (after the father of the donor or the Thompson-Yates Laboratories) Amongst those present, in addition to Lord Lister (who performed the opening ceremony) were Sir Richard Thorne K C.B, Sir Charles Cameron (Dublin) Sir Christopher Nixon, Sir Bosdin Leech, Sir James C Browne, Dr Church (the President of the Royal College of Physicians of London), Dr J W Moore (the President of the Royal College of Physicians of Ireland), the Lord Mayor of Liverpool, Mr Alfred L Jones (the Chairman of the Liverpool School of Tropical Diseases), Major Ross, Indian Medical Service, Professor Michael Foster, &c.

Mr ADAMSON (the president of the Royal Southern Hospital) in requesting Lord Lister to declare the Samuel Henry Thompson Ward to be now set apart, in connexion with the newly established Liverpool School, for the treatment of special cases of tropical diseases drew attention to the fact that this was no new move on the part of the committee of the hospital for since the foundation of the hospital 57 years ago the wards had never been free from tropical maladies and it was an interesting fact that during the last few years 460 cases had been under treatment in these wards In 1877 19 cases of malaria were brought to the hospital in one day The proximity of the hospital to the docks was the chief reason for the patients being carried thither The ward which his lordship had just opened was full The occupants of the beds, 12 in number, represented the following nationalities—viz China, India the United States, Norway, Sweden Russia, Finland, England, and Ireland The tropical diseases from which the patients were suffering had been contracted in Java, India, Brazil Savannah, South Carolina, Sierra Leone, Forcados, Old Calabar, Benin, and Cape Coast Castle They also hoped to train nurses who would go abroad, provided not only with a certificate of competency as fully qualified nurses, but who had under the medical staff of the hospital acquired a special knowledge of tropical diseases It was also hoped to train negresses as nurses

Lord LISTER, in declaring the ward open, felt sure that Liverpool was doing in this matter what was of the greatest importance for the welfare of mankind It might have been supposed by some people that the treatment of tropical diseases in Liverpool was a somewhat fictitious matter and that patients were got together for the purpose of the school and for nothing else but they now learnt that patients with tropical diseases had for a long time past been treated in that hospital At the same time it was to the advantage of those patients that there should be a distinct tropical diseases school. In direct proportion as any hospital or hospital ward had associated with it a school in which diseases were earnestly studied in all their bearings and under the critical eye of observers was the welfare of the patients People sometimes had the notion that a hospital with a medical school attached was no so good for the patients as a hospital which had no medical school There could be no more ridiculous mistake Lord Lister said that he could not avoid saying that the committee of the Liverpool School of Tropical Diseases were to be congratulated on having obtained the services of so distinguished a man in that particular class of diseases as Major Ross That gentleman's observations had been of the highest importance and every week or two they saw evidence and confirmation of the efficacy of his work, the recognition of which came from Germany France, and other countries His lordship also congratulated the school on having Professor Boyce as the head of the pathological department

THE INAUGURAL DINNER

The day's proceedings were followed by the inaugural banquet which was presided over by Mr Alfred L Jones (the chairman of the school), with Lord Lister on his right as the guest of the evening and the Lord Mayor of Liverpool on his left Amongst the other guests were Dr Church (President of the Royal College of Physicians of London), Professor Michael Foster (President-elect of the British Association), Dr J W Moore (President of the Royal College of Physicians of Ireland), Sir Richard Thorne, K.C B (Principal Medical Officer to the Local Government Board), Sir William Broadbent, Bart, His Excellency F M Hodgson, C.M G (Governor of the Gold Coast), Sir C Nixon, Sir J Crichton Browne, Sir C Cameron, Sir Bosdin Leech, Sir Raylton Dixon, Sir J S Willox M P, Sir E. Russell Mr W F Lawrence, M P, Mr A F Warr, Mr C McArthur, M P, the President of the Manchester Chamber of Commerce, Professor Clifford Allbutt (Regius Professor of Physic, Cambridge University), Dr Patrick Manson, Dr Waldemar Haffkine, C I E Mr W Adamson (vice-chairman of the Liverpool School of Tropical Diseases), Principal Glazebrook, Professor Boyce, Professor Paterson, Professor Carter, Dr Alexander, Dr Adam, Mr J W Hughes Mr Charles W Jones Mr Charles Booth, jun. Mr J O Strafford, Colonel Goffey Mr J Chadwick, and Mr A. H Milne (honorary secretary), representing the committee of the school, the town clerk, the head constable, Dr E W Hope (the medical officer of health of Liverpool) the general manager and secretary of the Mersey Docks and Harbour Board, the secretary of the Chamber of Commerce, the Presidents of the Cotton Timber General Brokers, West India and African Associations, the President of the Liverpool Consular Association (the Consul General for Brazil), the secretary (the Consul for Uruguay) and the treasurer (the Belgian Consul) of the same, the Consul of the United States of America the Consuls-General for Chili, Belgium, France, Mexico, and Italy, the Consuls of Costa Rica, Denmark, Norway, Sweden, Switzerland and Venezuela, Professor Sims Woodhead, Professor S Martin, Mr Pye-Smith Dr Leech Dr Rose Bradford, Major Ross, I M S (Lecturer on Tropical Diseases to the Liverpool School), Mr R Brocklebank, Mr Walter Holland Mr R. D Holt Mr A Garnett Mr E K Muspratt Mr W J Davey, Mr W B Bowring, Colonel Nicholson, Major Herbert, Mr John Rankin, Mr Alfred Booth Mr W Killick, Mr L S Cohen, Mr R T Clarke Dr H. O Forbes Mr Mitchell Banks, Dr Macfie Campbell, Mr R Jones, Dr Cameron, Mr Puzey Dr Barr Mr Damer Harrisson Mr W Bolton, Mr G R Wilson, Mr H. J Ward Mr John Holt Mr G R Sandbach Mr J Handaside Dick, Mr J B Hutton Mr J Walkden Mr G H Paterson, Mr H Cottrell, Mr A T Crawford, Mr E H. Harrison, Mr A McNicol, Captain Voules Mr E H Cookson Mr L. Cappel, Dr Macalister, Mr Newbolt, Dr Berry Dr Barendt Mr Holland, Dr H Jones, Dr Baker Dr Owen, Dr Morris, Dr Archdall the Editor of the *Journal of Commerce* the Editor of the *Shipping Telegraph*, Mr R. P Haddon Dr Hill, Dr Warrington, Dr Mott, Dr Steeves, Mr J Houlding Mr F Willis, Dr Nisbet, Mr A Maxwell Dr Bernard, Mr J Tunnicliffe Mr C Killick, Mr G Hamilton Dr R Hamilton Dr Davidson Dr Grünbaum Professor Raleigh Professor Sherrington Professor Lodge, Professor Herdman Dr Caton, Dr Glynn Mr J Stewart Mr A T Squarey Mr W D Hughes, Mr G T Addis Mr W P Hartley Mr J Pickering, Dr Roberts Dr Clarke, Mr W Dalton Dr Abram Mr Bickersteth, Dr Permewan Dr Bushby, Dr Marsden Dr Manby Dr Annett Dr Rider, Dr Grossman Dr Thomas Dr Williams Captain Graham, Mr James Mr R Williams Mr David Jones Dr Lee, Dr Bradshaw Dr Richardson Dr Hayward, Mr G W Neville, Dr Moore Mr C McIver, Mr A. T Crawford, and others

After the loyal toasts had been duly honoured the

however, are included with the civil population" The general list of deaths comprises 18 from small pox, 13 from measles, 35 from enteric fever, 36 from dysentery, 59 from Mediterranean fever, 477 from tubercle, 459 from cardiopathy, and 1217 from enteritis, of the deaths from enteritis 1030 occurred at ages under five years and 187 at ages over five years Dr S Pisani, the chief Government medical officer, draws a gloomy picture of the infiltration of the subsoil with sewage in the suburban areas and urges the carrying out of drainage works No fewer than 2097 persons, almost half the number deceased, were interred in churches, and hermetically sealed zinc coffins are sometimes used The highest shade temperature was 96 3°F in June, the lowest being 41 4° in December No rain fell during June, July, and August, the total for the remaining months was 29 18 inches In the same report Dr Tem Zammit gives an account of laboratory work relative to the reaction of the serum of enteric fever and of Mediterranean (undulant) fever cases on the specific micro-organism of the respective diseases Cases of Mediterranean fever of one week s duration gave the agglutinative reaction immediately, long standing or early cases gave the reaction after a few minutes

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A SECOND special meeting of the Chelsea Clinical Society to consider the Preventive Treatment of Tuberculosis was held at the Jenner Institute of Preventive Medicine on Tuesday evening last Interesting papers were read and communications made by Dr Theodore Williams, Dr J E Squire, Dr R Maguire, Dr S H Habershon, Dr Rufenacht Walters and Sir C Gage-Brown We shall publish a report of the meeting in an early issue

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THE annual mess of volunteer medical officers organised by the Volunteer Medical Association will be held on Wednesday, May 10th, at Limmer's Hotel under the presidency of Major General Trotter, General Commanding the Home District Further particulars can be obtained from the mess secretary, Surgeon Lieutenant L A Bidwell, 59, Wimpole-street, Cavendish square, W

A COMPLAINT having been made to the Saxon Government by the husband of a woman who had died in the Dresden Clinic for Women that a necropsy had been performed on the body without his sanction the Minister of the Interior has ordered that in future no post-mortem examinations are to be made in hospitals without the express consent of the relatives

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THE thirty-first anniversary dinner in aid of the funds of the French Hospital and Dispensary is announced to take place at the Hotel Cecil on May 6th, when the chair will be taken by His Excellency the French Ambassador, supported by the Lord Mayor and the Sheriffs of London

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THE Baillie Lectures will be delivered in the large theatre of the St George s Hospital Medical School on Thursdays, May 11th, 18th, and 25th, at 5 P M, by Dr W Howship Dickinson, Baillie Lecturer for the year and consulting physician to the hospital

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THE chairman and members of the council of the Medical Graduates' College and Polyclinic will give a conversazione at the College, 22, Chenies street, Gower street, W C, on the evening of Monday, May 1st, from 9 till 12

H R H THE PRINCE OF WALES has nominated the following as delegates on behalf of the National Association for the Prevention of Consumption and Other Forms of Tuberculosis to the Berlin Congress for the Prevention of Tuberculosis —Sir Hermann Weber, Mr Malcolm Morris, Dr Hillier, and Mr C Rube

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AN International Congress of Veterinary Surgeons will be held at Baden Baden on August 7th-12th inclusive. Particulars can be obtained from the general secretary, Dr Casper, Baden Baden

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SURGEON GENERAL J A MARSTON, C B, has been selected to fill the appointment of Honorary Surgeon to the Queen, vacant by the death of Deputy Inspector General J Jee, V C, C B

THE annual dinner of old students of King's College, London, will be held at the Holborn Restaurant on Monday, June 26th Dr W S Playfair will take the chair

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THE Autumn Congress of the Sanitary Institute will be held this year in Southampton by invitation of the mayor and corporation, commencing on August 29th

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INAUGURATION OF THE LIVERPOOL SCHOOL OF TROPICAL DISEASES

FOLLOWING closely upon the opening of the Thompson Yates laboratories in University College, Liverpool, in October last by Lord Lister, it becomes our pleasing duty to record the inauguration on April 22nd of the new School of Tropical Diseases in Liverpool also by Lord Lister The idea of the institution of schools in this country for instructing in tropical diseases medical men about to practise in the tropics advocated by Mr Chamberlain some months ago was nowhere more eagerly taken up than in Liverpool At the annual dinner of the Royal Southern Hospital on Nov 12th, 1898, Mr Alfred L Jones, a prominent Liverpool citizen and West Africa merchant, made an offer of £350 a year to start a school in Liverpool for the study of tropical diseases The offer was made in the presence of Professor Rubert Boyce of University College, Liverpool, and Dr William Alexander of the Royal Southern Hospital The president of the Royal Southern Hospital accepted the generous offer on condition that University College, Liverpool, and the Royal Southern Hospital should be united in the undertaking This condition was cordially acquiesced in by Professor Glazebrook, the principal of the College The great interest subsequently taken in the project by Mr Alfred L Jones, aided by the indomitable energy of Professor Boyce, resulted in subscriptions and donations coming in from all quarters towards the expenses of the proposed school To those two gentlemen, warmly supported by the committee and medical staff of the Royal Southern Hospital, is due the establishment of the Liverpool School of Tropical Diseases The management of the school is in the hands of a strong committee, of which Mr Alfred L Jones is the chairman and Mr William Adamson (president of the Royal Southern Hospital) the vice chairman The committee also consists of duly appointed representatives of University College, Liverpool the Royal Southern Hospital, the Liverpool Chamber of Commerce, the Steamship Owners' Association, and the Shipowners' Association A sum of over £1700 has already been promised, partly in annual subscriptions and partly in donations, in support of the school, which promises to be of great value to all interested in tropical countries either in trade or otherwise A large floor in the Royal Southern Hospital has been set apart for tropical cases This floor includes a cheerful ward containing 12 beds, now fully occupied, also an extensive laboratory for the examination of blood, urine, fæces, &c, and furnished with the apparatus applicable to modern research Dr Rubert Boyce, the professor of pathology in University College, Liverpool will superintend the pathological department of the school, with Dr Annett as pathological demonstrator The committee have been fortunate in securing the services of Major Ronald Ross,

relatives who for days sometimes crouched about the patient's bed Dr Müller could not detect liability to bubonic infection in consequence of injuries and abrasions of the skin in persons coming in contact with plague patients with their filthy clothing He suffered from accidental deep punctured wounds on the fingers from split bamboos of which the hospital beds were made, and from swollen hands from mosquito bites, without taking any precaution beyond washing with solution of sublimate As to the stethoscope, he discarded it after a few days and performed auscultation with the bare ear without using special disinfection

There is a general consensus of opinion that the mortality from bubonic plague exceeds that of all other infectious diseases In the official report of the Arthur road Hospital we find it put down at 73 26 per cent inclusive of all admissions, Hindoos at 75 46 per cent, native Christians at 67 24 per cent, and Mussulmans at 66 38 per cent The mortality of men was put down at 73 24 per cent, of women at 75 73 per cent, and of children at 66 66 per cent.

The known high percentage of deaths leads to an unfavourable prognosis There can be no doubt that the prognosis depends upon two conditions—namely, the sum total of natural resistance of the organism and the virulence of the infection Dr Müller noticed that a soft pulse not exceeding from 130 to 140 and respiration not higher than from 30 to 40 may be looked upon as favourable Late appearance of buboes is an unfavourable sign, especially those on the neck near the angle of the lower jaw, whether those of the axilla are more fatal than those of the iliac region could not be decided It is questionable whether the appearance of carbuncles is a favourable sign, subcutaneous hæmorrhage proved the reverse, sweats are symptoms of approaching death, plague bacilli in the blood are a most unfavourable symptom (See the record on the Blood in Section 3, the Anatomical part of the report)

In typical cases the diagnosis is easy, in atypical it is very difficult even impossible, in doubtful cases bacteriological examinations alone, yielding positive results, can decide the question In cases presenting pneumonia when enlargement of the spleen is present the suspicion is considerable that the infection is present, an examination of the sputa and of the blood will establish a certainty

The Commissioners abstained from interfering in any way with the treatment Iodine injections per rectum were frequent. Alcohol was objected to by the patients In some cases primary buboes were injected with iodine carbolic acid, creolin, and sublimate and other mercurial preparations Dr Müller saw no good result from the treatment Buboes containing pus were opened, the ward boys applied poultices and dressings to them Surgical treatment by extirpation of the primary bubo should be early resorted to Supposing that the favourable course of the disease depends upon the heart's action an early administration of digitalis strophanthus, and large doses of alcohol would, in Dr Müller's opinion, be appropriate Administration of calomel and iodine enemata he considers useless Measures producing diaphoresis, on which the old literature on the plague insists, might be tried Owing to a tendency to hypostasis of the lungs cool baths would be justifiable Regarding methods employed by Haffkine, Yersin, and Lustig, mention is made in the Anatomical part (Section 3) of the report At page 42 there is the case of Custodio Francisco Ribeero, treated with Yersin's serum, fully described by Dr Müller, ending fatally

We cannot part from Dr H F Müller's masterly report without expressing our deep sorrow at the loss of a rarely gifted young professional brother to whose accomplished qualifications every page of his clinical report is a witness In it he leaves us as his legacy faithful sketches of the forms of the dire disease to which he fell a victim when attending on Franz Barisch, a servant in the Institute of Pathological Anatomy in Vienna, where Dr H Albrecht and Dr Ghon were completing the bacteriological examination of specimens which they brought with them from Bombay

The following is the complete history of Dr H F Müller's fatal illness compiled by Dr Rudolf Pöch It is highly instructive On Oct 15th Barisch showed symptoms of pneumonia, from the result of Dr Anton Ghon's and Dr H Albrecht's examination of the sputa, considering also his employment in the laboratory, suspicion arose that his was a case of poisoning by plague bacilli Dr Müller who was sent for to examine Barisch caused him to be placed in an isolation room at the General Hospital, taking all necessary precautions there At the same time disinfection was practised in Barisch's lodgings under the superintendence of Dr Ghon Although Dr Müller was unable to establish a positive diagnosis at first, he took every precaution by placing the patient in an isolation room and strongly warned the two nurses to use the greatest care whilst on duty He bestowed every attention upon the patient and did not hesitate to examine him repeatedly It was whilst performing a dangerous and self sacrificing service that he undoubtedly obtained the seeds of the disease On Oct 18th—that is, on the fourth day—Barisch died from plague pneumonia The diagnosis was completely confirmed on bacteriological as well as on clinical evidence On Oct 20th one of the nurses undergoing isolation became feverish On this account both she and her companion were transferred into the "observation room" of the Franz Joseph Hospital, to which Dr Müller himself migrated, volunteering his services for the treatment of the patient On his arrival at the hospital Dr Müller was apparently still quite well, but the same evening he was chilly, notwithstanding that the room was very well warmed he walked about shivering and rubbing his hands He complained of great depression and pain in the back, he coughed without expectorating and attributed his being unwell to physical over-exertion and to having caught cold On the Sister of Mercy in attendance he made the impression of suffering from fever She asked him to take his temperature, but Dr Müller did not do so During the night he slept soundly On Oct 21st Dr Müller paid a visit to Barisch's two nurses He looked very pale, complained of great weakness, and laid down at nine o clock in the forenoon "to take more rest" His pulse was 110, he coughed much without expectoration About noon he got up, but shortly afterwards was obliged to go to bed again His temperature, taken for the first time, stood at 38·2° C. The first expectoration now made its appearance, it was reddish and thin Dr Kretz examined the sputum and found a large number of plague bacilli Notwithstanding the attempt to conceal from him the result of the bacteriological examination, from the clinical condition of his illness he established a clear diagnosis of plague pneumonia and stuck to that conviction His pulse which was small and elastic rose to 120 at 2 P M His temperature by 6 P M reached 40° C There was no wandering Alcohol in abundance was administered and 0 6 grain of digitalis was given in infusion He was very thirsty and asked for Bilmer water to drink He positively declined to have an injection of plague serum In the afternoon he had two loose, not bloody yellow brown stools He slept a good deal during the night and awoke a few times, he was somewhat delirious, but soon fell asleep again On the 22nd in the morning the conjunctiva was very red He was unconscious fits of noisy delirium set in, and speech was mostly indistinct There were short but frequent paroxysms of coughing followed by large quantities of reddish thin sputa On this day Dr Müller took no solid food A second dose of digitalis was given as well as abundant (*reichlich*) quantities of alcohol In the afternoon he complained of pleuritic pains in the chest and asked for morphia Of the prescribed dose he hardly took one-third the pains having subsided in the meanwhile. At 6 P M respiration was very hurried (59 per minute) and cyanosis set in Cough was increasing in frequency, his breathing was short and stertorous, there was abundant blood stained expectoration There was no hæmorrhage of the skin and no bubonic enlargement was evident In the course of the afternoon four thin bloodless stools were passed accompanied by pain Consciousness was failing When the thermometer was applied the patient was roused from his drowsy state and began to count his pulse and respiration In so doing he made repeated mistakes and began counting again until he arrived at a result. At 10 P M the temperature fell to 37 8° C and for awhile consciousness became clearer followed by great restlessness and delirium On Oct 23rd at 1 A M the patient got up and with assistance walked twice up and down his room, he returned to bed and slept, later he awoke once more and passed urine, Willingness was no unconscious passing of stools or of urine. At 3 A M the temperature stood at 38° C His breathing was most difficult and cyanosis was increasing After 4 15 stertorous respiration set in and large quantities of fluid ran from the mouth, at 4 30 he expired Dr Müller was only 32 years of age

CHAIRMAN proposed "The Study of Tropical Diseases" and said that he often wondered why Liverpool had not sooner taken up the study of tropical diseases scientifically He felt that the present effort was worthy of all England and there was a feature connected with it which was most pleasing That was the assistance which they had received from other countries Germany, Holland, and Belgium had sent liberal contributions The speaker paid a high tribute to the Royal Southern Hospital and to Professor Boyce for their public spirit

Lord LISTER, who responded to the toast, said that he was fully convinced of the great importance of making a special study of tropical diseases The medical student in the ordinary hospital had rare opportunities of seeing these diseases and for a man who was about to practise in the tropics it was essential that he should have opportunities of studying them here before embarking on his tropical career In Liverpool they had a supply of tropical diseases second to none in the British Isles He had been over the laboratories in which these investigations were to be conducted and they seemed to him to be eminently satisfactory He had also seen the syllabus of the course of instruction Such being the case he sympathised with them deeply in feeling that it was somewhat of a hardship if men who had studied in Liverpool under the best conceivable conditions that could exist in the British Isles had nevertheless to go to London He felt so strongly in the matter that he took the opportunity of seeking an interview with Mr Chamberlain on the subject He found that Mr Chamberlain cordially sympathised with them in their efforts, and in the second place he learned from him that the arrangement proposed was made for only one single year and he commissioned him to say to them that when that year had expired he would reconsider the question He (Lord Lister) hoped that the time would come when they would be in coöperation with the London School of Tropical Diseases which had his heartiest sympathy

Dr J W MOORE (the President of the Royal College of Physicians of Ireland) also responded to the toast and said that it was a strange thing that in studying diseases familiar to their own country they sometimes omitted to study those prevailing in tropical or sub-tropical climates One disease particularly before his mind was typhus fever which had always been regarded as peculiar to sub Arctic climates and especially to Irish populations As far as Ireland was concerned it was rapidly becoming the extinct dodo of medicine but he was astonished to read in the last volume of the "Twentieth Century Practice" an elaborate article on typhus fever written by a Mexican, based on his practical experience of the disease in Mexico He congratulated Liverpool upon the establishment of the laboratories which they had had the privilege of inspecting and upon that special ward in the Royal Southern Hospital The Lord Mayor proposed "The Liverpool School of Tropical Diseases" which was responded to by Dr William Carter and Professor Boyce Dr Church (the President of the Royal College of Physicians of London) replied to the toast of "The Medical Profession" in a polished speech Professor Foster (President-elect of the British Association) also acknowledged the toast in a speech brimful of humour The toast of "Our Guests" was replied to by the Governor of the Gold Coast and Mr W F Lawrence, M P The proceedings of the day reflected much credit upon Liverpool and marked a red letter day in its annals

PLAGUE IN BOMBAY[1]

(Concluded from p 1116)

IN accordance with the reports of former epidemics and the experience of the Austrian Commissioners we are led to assume as an unquestionable fact that in both forms of the plague—the bubonic and the pneumonic—the initial infection is a local one and that it remains so The primary infection (through the skin) is the cause of the bubonic disease and of the development of plague metastases But if in every such case we must assume a primary local and then a locally fixed source of continuous infection we must admit the existence of a primary bubo in every stage of the disease, even if the evidence thereof cannot be made out with absolute certainty either clinically or anatomically Dr Müller (p 209) says that in his experience post-mortem examination has shown considerable glandular swellings which have entirely escaped detection during life We must conclude, therefore, that a primary bubo may exist for days before evidencing pain or swelling It is even conceivable that the course of the symptoms may remain entirely localised, although clinically we find that even in mild cases a general infection of the system may exist, proved by a subsequent appearance of a bubo, carbuncle, enlargement of the spleen, and subcutaneous hæmorrhage[2] The prognosis depends upon the capability of resistance of the organism, especially of the circulatory and nervous centres, against the poison in the blood.

Clinically it is impossible to establish any difference in the type of the plague Being a disease of one nature (*einheitlich*), only the symptoms under which it manifests itself may be differentiated, *since they depend upon an* aggregate of influences, such as the natural resistance of the organism, the virulence and quantity of the poison to be overcome, and the manner in which it found its entrance into the system A correct differentiation can be based only upon the way in which the disease invaded the organism, and on this principle we distinguish the glandular bubonic and the pneumonic plague

The Commissioners during their stay at the height of the epidemic in Bombay did not have sufficient opportunities to come to a conclusion regarding the period of incubation, they adduce, therefore the opinion of other observers, especially that of Dr Choksy (p 214), chief medical officer of the Arthur road Hospital, who lays it down at from three to six days, in exceptional cases below, in others above, that time, extending even to 12 days

Two doors are known at present as to the entrance of plague poison into the human system—namely, the *integument*, including the mucous membrane of the mouth, the nasal and the pharyngeal cavities, on the one hand, and the *respiratory* apparatus on the other From the consideration of these conditions follow the individual prophylactic measures The commonplace advice to avoid all contact with the person of the plague-stricken or with his expectoration and other excreta will not be accepted by those whose duty it is to be busy about the sufferer or by those who are linked by blood relationship Generally speaking, we should avoid all drawbacks lowering the vitality of the organism and excesses of all sorts, observe general hygienic principles, laying the chief importance upon a most scrupulous attention to the skin and disinfecting those parts of the body which come in contact with the patient or his excreta The prophylactic measures, therefore, in the bubonic plague are those generally observed in all infectious diseases Dr Müller adds "I bathed three times at least daily, chiefly on account of the heat, any injuries to the skin I covered with sticking plaster, the other measures as to clothing and diet which play an important part in ancient treatises on the plague we took no notice of"

Dr Müller is unable to give data regarding age, employment, &c, of the patients suffering from plague This much, however, he states that the most critical age of infection may be put down at between the ages of 20 and 30 years. He had five cases between 10 and 15 years, 13 between 15 and 20 years, 12 between 30 and 40 years, three of 50 years, and one of 60 years of age The youngest patient was an infant a few months old extremely emaciated, the child of a Hindoo opium eater She had the typical bubo, of the size of a hazel nut, in the right groin The child recovered The official report for 1896–97 gives much information on this subject

Owing to hygienic precautions the medical staff of the hospitals escaped with one exception, that of Dr P N Davda (a Jain), none of the sweepers and wardboys died, although they had to poultice and dress the incised buboes. The same freedom was observed among the numerous

[1] Über die Beulenpest in Bombay im Jahre 1897 Gesammtbericht der von der Kaiserlichen Akademie der Wissenschaften in Wien zum Studium der Beulenpest nach Indien entsendeten Commission. Theile I und II A. Mit 5 Lichtdrucken und 36 Curventafeln In Commission bei Carl Gerold's Sohn, Buchhändler der Kaiserlichen Akademie der Wissenschaften. Wien 1898. (On the Bubonic Plague of Bombay in 1897 A Joint Report of the Commissioners sent to India by the Imperial Academy of Sciences of Vienna to Study the Bubonic Plague. Parts I and II A Vienna: Carl Gerold's Son. 1898.)

[2] See hæmorrhagic cases: p 45 of Dhondi Sadu," and p. 63 of Gopall Laximon,' and others.

no one save the medical officer of health was to board or leave the vessel on the journey up the canal. In the meantime the medical officer of health succeeded in vaccinating everyone on board, and on arrival at Salford the patient was removed to hospital. The general arrangements in this port as regards notification and the transmission of messages seem to be very complete, but it is to be feared that the staff must at times be overworked.

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 7297 births and 3993 deaths were registered during the week ending April 22nd. The annual rate of mortality in these towns, which had declined from 23.1 to 19.5 per 1000 in the three preceding weeks, further fell last week to 18.3. In London the rate was 17.2 per 1000, while it averaged 19.1 in the 32 provincial towns. The lowest rates in these towns were 11.8 in Cardiff, 12.9 in Burnley, 13.1 in Swansea, and 13.4 in Norwich; the highest rates were 22.0 in Brighton, 22.4 in Manchester, 22.6 in Newcastle-upon-Tyne, and 23.4 in Liverpool. The 3993 deaths included 394 which were referred to the principal zymotic diseases, against 379 in each of the two preceding weeks; of these 120 resulted from measles, 107 from whooping-cough, 64 from diphtheria, 42 from diarrhœa, 31 from "fever" (principally enteric), 20 from measles, and not one from small-pox. No death from any of these diseases was recorded last week in Halifax; in the other towns they caused the lowest death rates in Plymouth, Swansea, Huddersfield, and Gateshead, and the highest rates in West Ham, Birkenhead, Manchester, and Blackburn. The greatest mortality from measles occurred in West Ham, Bolton, Manchester, and Salford; from whooping-cough in Birkenhead and Oldham; and from "fever" in Birkenhead. The mortality from scarlet fever showed no marked excess in any of the large towns. The 64 deaths from diphtheria included 29 in London, five in Sheffield, four in Leeds, four in Blackburn, four in West Ham, three in Liverpool, and three in Portsmouth. No fatal case of small-pox was registered during the week under notice either in London or in any other of the 33 large towns, and three cases of small-pox were under treatment in the Metropolitan Asylum Hospitals on April 22nd. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2144, against numbers declining from 2584 to 2126 on the seven preceding Saturdays; 189 new cases were admitted during the week, against 167, 150, and 163 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London which had been 470 and 343 in the two preceding weeks, further declined last week to 277, and were 94 below the average. The causes of 64, or 1.5 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Nottingham, Leeds, Newcastle-upon-Tyne, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Blackburn, and Halifax.

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns which had declined in the three preceding weeks from 23.3 to 19.3 per 1000, further fell to 18.1 during the week ending April 22nd, and was slightly below the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 10.2 in Perth and 12.1 in Leith to 21.3 in Greenock and 21.9 in Dundee. The 554 deaths in these towns included 20 which were referred to measles, 13 to whooping-cough, eight to diarrhœa, five to "fever," four to scarlet fever, and three to diphtheria. In all, 53 deaths resulted from these principal zymotic diseases, against 79 and 54 in the two preceding weeks. These 53 deaths were equal to an annual rate of 1.8 per 1000, which corresponded with the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of measles, which had declined from 25 to 13 in the three preceding weeks, rose again to 20 last week, of which 11 occurred in Glasgow, six in Aberdeen, and three in Edinburgh. The 13 deaths from whooping-cough showed a slight further decline from recent weekly numbers, and included six in Glasgow, two in Dundee, and two in Greenock. The five deaths referred to different forms of "fever" corresponded with the number recorded in the preceding week, and were all registered in Glasgow. The fatal cases of scarlet fever, which had been three and seven in the two preceding weeks, declined to four last week, of which two occurred in Glasgow, where two of the three deaths from diphtheria were also recorded. The deaths referred to diseases of the respiratory organs in these towns, which had been 144 and 136 in the two preceding weeks, further declined to 119 last week, and were 33 below the number in the corresponding period of last year. The causes of 38, or nearly 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN

The death rate in Dublin, which had increased in the three preceding weeks from 31.6 to 33.4 per 1000, declined to 30.1 during the week ending April 22nd. During the past four weeks the rate of mortality in the city has averaged 32.0 per 1000, the rate during the same period being 19.7 in London and 18.9 in Edinburgh. The 202 deaths registered in Dublin showed a decline of 22 from the number in the preceding week, and included 10 which were referred to the principal zymotic diseases, against 15 and 10 in the two preceding weeks; of these three resulted from whooping-cough, two from "fever," two from diphtheria, two from diarrhœa, one from scarlet fever, and not one either from small-pox or measles. These 10 deaths were equal to an annual rate of 1.5 per 1000; the zymotic death rate during the same period being 1.7 in London and 1.2 in Edinburgh. The fatal cases of whooping-cough, which had been five and four in the two preceding weeks, further declined to three last week. The two deaths from diphtheria corresponded with the number recorded in the preceding week. The deaths referred to different forms of "fever," which had been five and four in the two preceding weeks, further fell to two last week. The 202 deaths in Dublin last week included 38 of infants under one year of age and 59 of persons aged upwards of 60 years; the deaths of infants showed a slight further increase, while those of elderly persons showed a further decline from the numbers recorded in recent weeks. Eight inquest cases and four deaths from violence were registered; and 71, or more than a third, of the deaths occurred in public institutions. The causes of 12, or nearly 6 per cent., of the deaths in the city last week were not certified.

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

THE following appointments are notified:—Fleet Surgeon W. E. Bennett to the *Crescent*; Staff Surgeon J. W. O. Underhill to the *Tribune*; Surgeons E. A. Penfold and J. Boyan to the *Crescent*; and W. H. Daw to the *Antelope*.

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonel Ernest H. Fenn, C.I.E., is seconded for service on the Staff. Captain James A. Murison resigns his commission.

Major E. O. Wight has been granted leave to England on private affairs to Oct. 21st. Captain Hughes holds himself in readiness to embark for Bombay.

INDIA AND THE INDIAN MEDICAL SERVICES

To be Surgeon-General: Colonel Lionel Dixon Spencer, C.B., Bengal Establishment. Surgeon-Lieutenant-Colonels to be Brigade-Surgeon-Lieutenant-Colonels:—*Bengal Establishment*: Daniel Nicholas Martin, Pundra Lall Dutt, Joshua Duke, John McConaghey, and Edward Palmer. Lieutenants to be Captains:—*Bengal Establishment*: Archer William Ross Cochrane, William Wesley Clemesha, James Alexander Black, Roger Parker Wilson, Victor Edward Hugh Lindesay, James Currie Robertson, Norman Robinson Jones, Rainier, Christopher Doring Davies, and Edmund Ludlow Perry. *Madras Establishment*: Michael Biddulph Pinchard, William James Nibloe, Clarence Barrymore Harrison, Nicholas Parcell O'Gorman, Lalor Thomas, Henry Symons, and Ernest Reinhold Rost. *Bombay Establishment*: Chintaman Ramchandra Bakhle and Krishnaji Vishnoo Kukday. *Retirements*: Colonel Daniel O'Connell Raye, Bengal Establishment; Lieutenant-Colonel Robert Andrew King Holmes

THE ROYAL ACADEMY

THE one hundred and thirty first exhibition of the Royal Academy opens to the public on May 1st What strikes us most about this year's exhibition is the complete sameness of the subjects which artists choose for the exercise of their talents, and this failing is especially noticeable in some of the landscape painters On the whole, we think the exhibition is not so good as that of last year Mr Sargent has no masterpiece like the Wertheimer portraits of 1898, the President is represented only by one portrait, Mr Swan has deserted pictures for sculpture, and there are no less than three enormous views of the scene outside St Paul's Cathedral on the occasion of the Diamond Jubilee Of the portraits we will first take those which will interest our readers specially as being those of medical or scientific men Mr Orchardson leads the way with a portrait of Lord Kelvin, and a very good one too Mr Sant exhibits a presentation portrait of the late Mr Henry Lee, F R C S (who, by the way, is described in the catalogue as M R C S), and Mr Frederick Goodall has a picture of Mr Henry E Juler F R C S Among other portraits of well known people and others are a masterly one of Mr Gerald Balfour by Mr Watts, of Dr Gregory, the Dean of St Paul s, by Sir W B Richmond, of Mrs Charles Hunter by Mr Sargent, who also sends an admirable picture of Miss Octavia Hill As good a picture as any is Mr W Llewellyn s portrait of Mrs Herbert Fuller

To come to pictures not portraits, 115, "Allotment Gardens," by Mr George Clausen, is sure to receive the attention which it is worth Another Associate, Mr La Thangue, sends four pictures, all good, and one more than good—namely 319, "Harrowing Mr Edwin A Abbey has two works, neither of which are so striking as the King Lear of last year, although 289, "O Mistress Mine, Where are you Roaming?" is quite worthy of the artist's well deserved reputation

Mr George Boughton's "Wintry Spring" (342) is very charming and delicate Of pictures by outside contributors we think 461 "The Tambour Frame," by Mr Melton Fisher, is the most remarkable Mr Fisher always manages his textures both of drapery and flesh without apparently the slightest trouble, and the result is a most restful and refined one Of the work of a master in a different style—Mr Albert Goodwin—everyone should look at 258, "The Street of Mansoul', 923, "Indian Afterglow," and a water-colour (1100), "Amsteg, St Gothard' Among other pictures in the water colour room are two beautiful landscapes by Mr Leopold Rivers, 1126, "A Sussex Valley," and 1096, "On the Sussex Coast" Mr Thorne Waite's "England s White Cliffs" (1165) is good The sculpture department is this year particularly noticeable, and we note with especial commendation two little statuettes by Mr Swan (1924 and 1927), the first being a leopard lying down and eating and the other a leopard running To the latter might well be applied a slight variation of the old epigram upon the Greek statue —

> 'See that Bacchante see, though formed in stone
> She s gained the threshold! Stop her or she s gone."

The lithe, sinuous, and yet rapid motion is marvellously expressed

Mr A Drummond's "The Gods of the Ancients" is a curious example of a good picture spoiled by a slip in detail The scene is a classical city, possibly ancient Rome in the second or third century Various Roman ladies are looking at images of gods, Egyptian and others One lady regards a crucifix with astonishment—and may well do so, for it must have been made at the earliest in the thirteenth century

The Misses Casella are represented by some of their clever wax medallions and various exhibitors show enamels, among which we may specially mention those by Mr Alexander Fisher, Mr Leon Solon, and Mr and Mrs Nelson Dawson Mr Herkomer's enormous shield with enamel pictures (2016) is [illegible]ng as a whole

Mr Uber [illegible]ombe John, whose singularly clever statue "The Elf" [illegible]ium von de[illegible] used last year and which we were delighted to see age[illegible] this year, has another charming work (2052) "Joyan[illegible]ssion, model for a bronze fountain Of the exhibition as a whole [illegible]e should say that the sculpture is above the average, a[illegible]ers the water colours, but that the oils are not so with the [illegible]rts[illegible]tion of a few

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH

River Tyne Port Sanitary District—During 1898 41 vessels were visited by Dr W E Harker on account of reported or suspected sickness on board, and we note that 58 cases of diarrhœa or choleraic diarrhœa had occurred while vessels were at sea There were, too, 10 cases of yellow fever on vessels coming from South America As regards emigrants 485 passed through the port during 1898, all being apparently bound for America There were inspected in a sanitary sense no less than 15,602 vessels, the total number of visits paid being 16 043 Out of the whole number inspected 1668 were found to be dirty and 378 had structural defects During the prevalence of small pox at Middlesbrough and Bilbao all arrivals were medically inspected, a special officer being appointed for night duty

Eastbourne Urban District—One of the four sources of water supply to this town has now been abandoned owing to the fact that through over pumping the salinity of the water markedly increased Eastbourne now possesses three isolation establishments, a general hospital for infectious disease, a shelter for persons whose houses are being disinfected or who themselves have been exposed to infection, and a small-pox hospital

Wigan Urban District—The voluntary notification of measles is in force in Wigan, but Mr William Berry, the medical officer of health, is of opinion that the notification of the first case in a household has not been of use in preventing the spread of the disease Enteric fever is "more or less endemic in Wigan" and Mr Berry is inclined to regard this endemicity as due to previous pollution of soil It will, he thinks, in spite of the much improved sewerage system, "take years to get rid of the bacillus of enteric fever from the soil" Wigan is about to draw a supply of water from Thirlmere, the corporation having arranged with Manchester for such a supply

Maidstone Urban District—Mr Matthew Adams reports that during 1898 the whole of Maidstone, with the exception of Barming Heath, was supplied with water from sources other than Farleigh, and on commenting upon the water from the four sources of supply now in use he points out that there is no absolute test for the purity of a given water, each water "being a law unto itself as regards purity Numerous analyses have been made of the several waters of Maidstone during 1898, and these Mr Adams has used for establishing as it were a sort of standard of the normal characteristics of each water Of the waters now in use that from Boarley 'appears to be a most excellent water,' that from Cossington is "evidently subject to surface influence," and that from Ewell is a "steady good greensand water," but the nitrates and phosphoric acid are regarded by Mr Adams as "habitually too high" The mid Kent water, which is also derived from the greensand, had but one "blemish' and that was a frequent turbidity from iron oxide As regards quantity the company have, Mr Adams states, had some difficulty in maintaining a full supply and an intermittent service had at times to be resorted to In the matter of isolation accommodation the district council have determined to materially enlarge their hospital

Manchester Port District—Dr J H Crocker, the medical officer of health of this district, is to be congratulated upon the complete report which he has made with reference to the year 1898 The district is an important one, embracing as it does the Manchester Ship Canal, the rivers Mersey and Irwell above Ince Ferry and Dungeon Point, and the river Weaver up to Frodsham Bridge. There abut upon the Ship Canal as many as 13 sanitary districts During 1898 there were inspected in different parts of this extensive district some 1346 vessels the majority being visited at Manchester or Salford A considerable number of cattle ships arrive in the waters of the port from Montreal, and the port sanitary inspector has hence been made an inspector under the Diseases of Animals Acts (1894 and 1896) Dr Crocker deals very promptly with any cases of infectious disease introduced into the port and as an instance that of the s s *Kotka* which entered the canal with a case of small pox on board may be mentioned The case was notified to the medical officer of health by telephone and instructions were given that

Correspondence.

Audi alteram partem."

OÖPHORECTOMY AND THYROID EXTRACT IN RECURRENT MAMMARY CANCER

To the Editors of THE LANCET

SIRS,—Dr Herman s account of his very successful treatment of a case of recurrent cancer of the breast by oöphorectomy *plus* thyroid extract will, I hope, draw attention strongly to this most interesting subject To my mind one of the most important points about this case is the fact that previously to the oöphorectomy menstruation had been irregular for six months and nothing had been seen for three months If the patient (aged 49 years) had not reached the menopause she was evidently on the verge of it My case, No 3 in the *British Medical Journal* of Feb 4th, 1899, was 49 years of age and had seen nothing for six months No benefit followed the oöphorectomy, but she was bed ridden with many visceral and osseous growths and I ventured to think that failure in this case did not prove that oöphorectomy after the menopause was valueless in cancer mammæ Dr Herman s present and to a less extent his former case tend to support this view But we have still to determine when the influence of the ovaries on cancer ceases Wonderful as the disappearance of cancer was in this instance I was sorry to be unable to agree with Dr Herman when he exhibited the patient at the Medical Society, that all cancer had disappeared but not without leaving traces I should fear that the traces left, particularly the ' keloid like nodules" and slight plaques in the skin around the healed ulcer, are cancer That these are not growing and ulcerating does not to my mind prove that they are not cancerous and will not ultimately behave as cancer usually does We have all been learning lately that cancer may lie dormant for many years I hope Dr Herman may prove right, but I think it is early to feel that if his two cases continue taking thyroid they have " a sure prospect of freedom from cancer

This brings me to the question of the part which thyroid plays in producing disappearance of cancer such as the above The question is interesting from the scientific point of view and important from the practical for thyroid has not appeared to me to be a drug borne as well as peppermint water and it is of some moment no to add unnecessarily to the sufferings of these patients

Now the facts are not quite as Dr Herman states them. In the paper above alluded to I tabulated seven cases of my own treated by oöphorectomy only (at least until its effect seemed exhausted) One of these cases (No 1) shows to my mind less evidence of existing cancer than Dr Herman's present case and a large amount of cancer was present when the oöphorectomy was done My argument is that if oöphorectomy alone effected the disappearance in this case it may have been the real agent in instances where thyroid was given in addition. In my case No 2 again nothing could have been more satisfactory than the rapid and all but complete removal of the numerous cancer nodules—after oöphorectomy only, but they soon recurred Was that because thyroid had not been given? It was given then at all events, 20 grains per diem, the patient being at her best much better than a the time of operation and not having 'developed new ovaries The most obvious result was the speedy loss of 5 lb Besides my own seven cases I collected eight others *in all of which thyroid was given* in addition to the oöphorectomy in three (not six) of these information was very scanty But they like No 1* and No 2* were Dr Beatson s own cases He stated at the Gynæcological Society that in them he had obtained no result or a very transient one, he was speaking of the treatment of breast cancer by oöphorectomy plus thyroid the method which he himself introduced, so until Dr Beatson corrects me, I feel I may assume that all were treated as Dr Herman would wish

Mr Cheyne states in his original account—and I repeat his statement in the first line of my remarks on thyroid treatment—that his two patients (No 3* and No 4*) were given thyroid but Dr Herman classes them with mine No 5* is Dr Herman s first case We have then eight or adding Dr Herman s second case nine cases (not four) treated by oöphorectomy plus thyroid In three out of nine (not three out of four) the cancer disappeared more or less completely The first of them (Dr Beatson's) became ill about two and a half years after the oöphorectomy—I believe of intra thoracic trouble, but I cannot at the moment find Dr Beatson s recent note We may hope that recurrence is not at the bottom or the mischief, but there must be good reason to fear that it is Dr Herman s first case remains well 25 months after the operation and his second nine months after The other six cases were disappointing failures Perhaps thyroid was not steadily persisted in throughout all these cases, but it was given at first and would doubtless have been continued had it seemed to do good

Dr Herman fairly states Page and Bishop's case when he says that ' a cure followed the administration of thyroid extract " My criticism (*loc cit*) on it was that the case did not read like one of cure from the steadily increasing action of a drug, and I suggested at the Medical Society that the disappearance of cancer in this instance might be on all fours with that remarkable case shown by Pearce Gould at the Clinical Society at the end of 1896 (and to be shown again by him next Friday evening) in which no treatment at all was employed, with a result as good as has yet been attained by oöphorectomy

With regard to the cases in which I gave thyroid, three had undergone oöphorectomy and two were long past the menopause—a state which may be very different from the former I cannot help feeling that out of the five some convincing evidence of the action of thyroid should have been obtained, for, as Dr Herman reminds us, the patient could not "develop new ovaries " I venture to think from the above analysis that the evidence in favour of thyroid is not at present strong I would add that at the present stage simple arithmetical calculations will not help us much towards the solution of questions such as Dr Herman raises Each case, its treatment and result, must be carefully analysed and compared with others In my list of seven will be found two extremely bad cases (No 3 and No 7), two post-menopausic, one of them 64 with practically no ovaries These were in a sense "exploratory operations done to ascertain the scope of the operation the patients understanding the real state of matters Finally in No 5 and No 6 it was difficult for reasons stated, to estimate the value of the oöphorectomy, so I kept them in a separate class If well considered I believe that such facts as we have before us support (not establish) the view that oöphorectomy is by far the most important factor in the treatment and that it may be the only one

I am, Sirs, yours faithfully

April 25th, 1899 STANLEY BOYD

"THE PATHOLOGY OF THE PERICARDIUM."

To the Editors of THE LANCET

SIRS —Mr Harold L Barnard s paper in THE LANCET of April 22nd on "Certain Points in the Pathology of the Pericardium" is a very valuable one What he says about the pericardium carries conviction, but I do not think the entire paper equally convincing and it is for this reason and also because the subjects treated in it are so important that I venture to send the following comments

1 Cohnheim pointed out several years ago that the influence of gravity on the upward flow is neutralised by muscular contractions and by the aspiration of the thorax.

2 It is generally held, and Mr Barnard accepts the view that the respiratory movements aid the circulation I am doubtful whether under ordinary circumstances they do so to an appreciable extent Granting that the rhythmic descent of the diaphragm forces blood into the right heart It is doubtful whether the expansion and contraction of the lungs facilitate the blood flow The aspiration of the thorax is in large measure independent of thoracic movement Mr Barnard writes as though it only occurs during inspiration, while as a matter of fact it continues in operation under ordinary circumstances to the end of expiration Thoracic aspiration is chiefly due to the stretching of lung tissue and this stretching is the same in inspiration and expiration, some aspiration however is due to the fall of intra pulmonary air pressure during inspiration, but the accelerating influence of this on the circulation is so it seems to me entirely neutralised by the increased intra pulmonary pressure which takes place during expiration I say the aspiration of the thorax is less

Bengal Establishment, and Lieutenant-Colonel William Henry Thornhill, Madras Establishment —*London Gazette*

Majors to be Lieutenant-Colonels —*Bengal Establishment* Francis Frederick Perry, Stephen Little, George Hart Desmond Gimlette, Christian Bernard Hunter, and Julian Carter Carington Smith *Madras Establishment* William Frederick Thomas, Henry George Luther Wortabet, Edulji Palanji Franchman, Richard James, Sarkies Carrapiet Sarkies, and David Stuart Erskine Bain Captains to be Majors —*Bengal Establishment* William Henry Wilson Elliot, William Ronaldson Clark, George Frederick William Braide, Robert John Marks, Charles Edward Sunder, Malcolm Albert Ker, Andrew Buchanan, Lewis Gordon Fischer, William Vost, John Garvie, Clarence Edwin Lloyd Gilbert, Courtenay Clarke Manifold, and Gerard Beatty Irvine *Madras Establishment* Frederick James Crawford, David Simpson, Robert Robertson, and Thomas Charles Moore *Bombay Establishment* Charles Hardwick Louw Meyer, Letterstedt Frederick Childe, Herbert Herbert, and Thomas David Mollis Barry

ARMY MEDICAL RESERVE OF OFFICERS

Surgeon Captain J Cameron to be Surgeon Major

VOLUNTEER CORPS

Artillery 2nd Cinque Ports (Eastern Division Royal Artillery) Surgeon Lieutenant H Marshall resigns his commission 2nd Devonshire (Western Division, Royal Artillery) Surgeon-Captain A K Crossfield to be Surgeon Major *Rifle* 2nd Middlesex Surgeon Lieutenant H W Syers to be Surgeon Captain

VOLUNTEER INFANTRY BRIGADE

Cheshire Surgeon-Lieutenant-Colonel A Hamilton, 2nd Volunteer Battalion the Cheshire Regiment, to be Brigade Surgeon Lieutenant Colonel, on appointment as Senior Medical Officer to the Brigade

ALDERSHOT

The question of milk supply in connexion with the sewage farm at Aldershot raised quite a sharp discussion in the House of Commons last week when the consideration of the Army Estimates was resumed The matter was obviously not a very suitable one for discussion by a Committee of Supply on the Estimates As we understand, no order has yet been issued sanctioning the sale of milk from the dairy of the sewage farm in question The civilian inhabitants of the district have raised a strong opposition against this being done and several of the members of the House are apparently opposed to the sale of milk from any sewage farm The Aldershot sewage farm was, it will be remembered, some years ago when under a different management to that at present, in a very unsatisfactory condition—little better, in fact, than a sewage swamp, but it is alleged to be now in a very different state and to have been for some time working very satisfactorily Whether this be so or not can only be determined, of course, by careful inspection and inquiry into all the facts There is no evidence, however, that the crops of a sewage farm are unwholesome or that the dairy produce of well managed sewage farms gives rise to disease Mr Powell Williams in citing the case of Birmingham, might easily have added a list of other places where milk has been supplied from dairies in connexion with sewage farms to the residents in their neighbourhood It all depends upon the adequacy and efficiency of the arrangements, the care that is exercised in the management of the farm, and the proper inspection of the cattle and everybody employed on it to see that they are healthy and free from disease The Government advisers and the medical officers at Aldershot fail to see any reasonable ground, it is said, for prohibiting the sale of the dairy produce at Aldershot Mr Powell Williams having already promised that a special expert inquiry is to be made into the matter and that the War Office will be guided by the result of that inquiry we do not see that much remains to be said in the meantime

THE PHILIPPINE WAR

There has been some sharp fighting of late in the Philippines and the American troops have had to encounter a good deal of hardship in their marches owing to the difficult nature of the country, in addition to the casualties they have sustained in capturing the entrenched positions held by the insurgents The heat is great and we read of men dying from sunstroke There is necessarily a good deal of disease incidental to campaigning under such conditions—principally fever, diarrhœa, and dysentery The rainy season has begun and there must be a suspension of active hostilities during its continuance This is only what might have been expected in the event of the insurgents refusing to come to terms and being bent on continued resistance. It will be interesting to watch the effect which recent events will have upon political opinion in America and upon the course of action of the Government of that country If Aguinaldo's army has been disastrously defeated at the attack and capture of Calumpit and reinforcements are arriving so as to enable the Americans promptly to follow up their victory we may hope that the neck of the rebellion will soon be broken

RED CROSS DECORATION FOR NURSES

The Queen has conferred the Decoration of the Royal Red Cross upon the under mentioned nurses —Miss Catherine Sarah Mowbray, late Indian Nursing Service, Miss Mary Ellen Barker, Indian Nursing Service, and Miss Theresa McGrath, in recognition of the services rendered by them in connexion with the nursing of the sick and wounded during the late operations on the Punjab Frontier, Miss Sarah Lucy Wilshaw and Miss Mary Ellen Harper, both of the Army Nursing Service, also receive the decoration in recognition of their services in tending the sick and wounded in Egypt in connexion with the recent operations in the Soudan

A BRITISH CENTRAL COMMITTEE OF THE RED CROSS SOCIETY

With the view of keeping the Red Cross Society more in touch with the regular army in times of peace, so that in times of war the medical services may know exactly the amount, nature, and condition of the aid available from voluntary sources, a Central British Red Cross Committee has been formed and has now been recognised by the Secretary of State for War as the official channel through which offers of voluntary aid in time of war will be accepted by the War Office The committee are at present holding their meetings in the board room of the medical division of the War Office, 18, Victoria street, Westminster Lord Wantage has been appointed chairman and Major W G Macpherson, Royal Army Medical Corps, secretary

THE VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION COMPETITION

The Volunteer Ambulance School of Instruction competition for the Hamilton Challenge Bowl, which has been held for some years by the 24th Middlesex (Post Office Rifles) has been decided Anatomy, First Aid, and Drill were the three subjects, and teams from a number of Volunteer regiments competed The Challenge Bowl was won by the team from the 1st Cadet Battalion the King's Royal Rifle Corps The corps, which has a large and very smart ambulance section, is in want of a Medical Officer The Commanding Officer's address is 2, Finsbury square

LORD KITCHENER'S RIDE THROUGH THE EASTERN SOUDAN

Lord Kitchener has arrived at Berber after a camel ride of 800 miles through the Eastern Soudan He found the people thankful for their release from all the sufferings which they had undergone under Dervish rule Everything points to the country settling down under the new conditions and to the gradual return to a peaceful and contented life on the part of the sheiks and different tribes

VOLUNTEER MEDICAL OFFICERS' DINNER

The annual mess of the Volunteer Medical Officers will be held on Wednesday, May 10th, at Limmer's Hotel under the presidency of Major Trotter, General Commanding the Home District Those desirous of attending should send in their names to Surgeon Lieutenant L A Bidwell, 59, Wimpole street, Cavendish square, W

THE QUEEN'S BIRTHDAY

It is announced that the Queen's Birthday will be celebrated in London alone on Saturday, June 3rd next, and at all other stations, naval and military, on Wednesday, May 24th next

In recent Army orders issued from the War Office at Cairo the Sirdar expresses his regret at the retirement from the Egyptian Army of Colonel Gallwey, C B R A M C, and after detailing the services rendered by that officer wishes him, on behalf of the Army, every success in his future career

Surgeon General J A Marston, M D St And, C B, has been selected to fill the appointment of Honorary Surgeon to the Queen, vacant by the death of Deputy Inspector General J Jee, V C, C B

Correspondence.

Audi alteram partem."

OÖPHORECTOMY AND THYROID EXTRACT IN RECURRENT MAMMARY CANCER

To the Editors of THE LANCET

SIRS,—Dr Herman's account of his very successful treatment of a case of recurrent cancer of the breast by oöphorectomy *plus* thyroid extract will, I hope draw attention strongly to this most interesting subject To my mind one of the most important points about this case is the fact that previously to the oöphorectomy menstruation had been irregular for six months and nothing had been seen for three months If the patient (aged 49 years) had not reached the menopause she was evidently on the verge of it My case No 3 in the *British Medical Journal* of Feb 4th, 1899, was 49 years of age and had seen nothing for six months No benefit followed the oöphorectomy, but she was bed ridden with many visceral and osseous growths and I ventured to think that failure in this case did not prove that oöphorectomy after the menopause was valueless in cancer mammæ Dr Herman's present and to a less extent his former case end to support this view But we have still to determine when the influence of the ovaries on cancer ceases Wonderful as the disappearance of cancer was in this instance I was sorry to be unable to agree with Dr Herman when he exhibited the patient at the Medical Society, that all cancer had disappeared but not without leaving traces I should fear that the traces left particularly the keloid like nodules" and slight plaques in the skin around the healed ulcer, are cancer That these are not growing and ulcerating does not to my mind prove that they are not cancerous and will not ultimately behave as cancer usually does. We have all been learning lately that cancer may lie dormant for many years I hope Dr Herman may prove right, but I think it is early to feel that if his two cases continue taking thyroid they have "a sure prospect of freedom from cancer."

This brings me to the question of the part which thyroid plays in producing disappearance of cancer such as the above. The question is interesting from the scientific point of view and important from the practical for thyroid has not appeared to me to be a drug borne as well as peppermint water and it is of some moment not to add unnecessarily to the sufferings of these patients

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With regard to the cases in which I gave thyroid, three had undergone oöphorectomy and two were long past the menopause—a state which may be very different from the former I cannot help feeling that out of the five some convincing evidence of the action of thyroid should have been obtained for as Dr Herman reminds us, the patient could not "develop new ovaries I venture to think from the above analysis that the evidence in favour of thyroid is not at present strong I would add that at the present stage simple arithmetical calculations will not help us much towards the solution of questions such as Dr Herman raises Each case, its treatment and result, must be carefully analysed and compared with others In my list of seven will be found two extremely bad cases (No 3 and No 7), two post-menopausic, one of them 64 with practically no ovaries These were in a sense "exploratory" operations done to ascertain the scope of the operation the patients understanding the real state of matters Finally in No 5 and No 6 it was difficult, for reasons stated to estimate the value of the oöphorectomy so I kept them in a separate class If well considered I believe that such facts as we have before us support (not establish) the view that oöphorectomy is by far the most important factor in the treatment and that it may be the only one

I am, Sirs, yours faithfully

April 25th, 1899 STANLEY BOYD

"THE PATHOLOGY OF THE PERICARDIUM"

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SIRS —Mr Harold L Barnard's paper in THE LANCET of April 22nd, on "Certain Points in the Pathology of the Pericardium" is a very valuable one. What he says about the pericardium carries conviction, but I do not think the entire paper equally convincing and it is for this reason and also because the subjects treated in it are so important that I venture to send the following comments

1 Cohnheim pointed out several years ago that the influence of gravity on the upward flow is neutralised by muscular contractions and by the aspiration of the thorax.

2. It is generally held, and Mr Barnard accepts the view that the respiratory movements aid the circulation. I am doubtful whether under ordinary circumstances they do so to an appreciable extent Granting that the rhythmic descent of the diaphragm forces blood into the right heart it is doubtful whether the expansion and contraction of the lungs facilitate the blood flow The aspiration of the thorax is in large measure independent of thoracic movement. Mr Barnard writes as though it only occurs during inspiration, while as a matter of fact it continues in operation under ordinary circumstances to the end of expiration. Thoracic aspiration is chiefly due to the stretching of lung tissue, and this stretching is the same in inspiration and expiration, some aspiration, however is due to the fall of intra pulmonary air pressure during inspiration but the accelerating influence of this on the circulation is so it seems to me entirely neutralised by the increased intra-pulmonary pressure which takes place during expiration I say the aspiration of the thorax is largely

independent of thoracic movement, it may be increased simply by increasing the mean size of the chest, as by inflating the chest to the utmost and limiting the expiratory range In this way the transference of blood from the cavæ to the aorta is facilitated It may be further aided by prolonging the inspirations at the expense of the expirations, for by this means the period of quickened pulmonary flow (from diminished intra pulmonary tension) becomes longer than the period of retarded flow (from increased intra pulmonary tension) In such athletic exercises as running, when it is desirable to facilitate the pulmonary flow to the utmost, we see these principles in operation the mean size of the chest is increased—inspirations being full and expirations shallow—and as breathlessness increases the latter become shorter than the former Directly this modified rhythm occurs we may regard the pulmonary movement as aiding the circulation, but not before I wish to emphasise the increase in the mean size of the chest which occurs in dyspnœa It takes place in pathological as well as in physiological breathlessness I never remember to have seen a case of dyspnœa in which the chest was not expanded (see my "Respiratory Exercises in the Treatment of Disease" p 91 *et seq*)

3 Mr Barnard contends that the expiratory act favours the pulmonary circulation During the expirations which accompany vigorous exercise the lungs are (using his own words) 'squeezed empty like a sponge into the left ventricle" Now, I am not denying that in some cases where it is desirable to aid the pulmonary flow the lungs may be forcibly squeezed in this way, but such occasions must be rare As I have already pointed out, expirations tend to be incomplete when there is difficulty in the pulmonary circulation Let anyone run quickly up a hill so as to get greatly out of breath and he will see how imperious is the instinct to keep the lungs well expanded and how very difficult it is to fight against this instinct and forcibly squeeze the lungs by a deep expiration There is no doubt that blood may in this way be forced out of the lungs into the left ventricle, but on the other hand the output from the right ventricle is diminished by their compression—witness the effect of a forcible expiration on the superficial veins—and does not this more than counterbalance the increased output? Moreover, one does not see the need for squeezing the blood out of the efferent side of the pulmonary circuit, once there the blood has little difficulty in reaching the left heart if the latter be sound, seeing that the blood in the pulmonary veins always flows under a positive pressure

4 The view that the rhythmic descent of the diaphragm aids the hepatic circulation was put forward some years ago by Mr Mayo Collier The difficulty I find in accepting this view is the absence of valves in any of the vessels concerned. Mr Barnard says the diaphragm in its descent "squeezes the portal vein" Does he mean by this that it more or less completely obliterates this vessel? If it does, then, indeed, the hepatic circulation must be aided in the way suggested, but otherwise would not compression of the liver tend to drive the blood as much one way as the other? And is there any evidence that the portal vein is materially narrowed by the descent of the diaphragm?

5 Mr Barnard's remarks on the abdominal force pump action in extensive pericardial effusion solve a difficult problem Some such action seems to be necessary in order to keep the right auricle and cavæ from collapse It is somewhat doubtful, however, whether the force pump comes into action under physiological conditions In most vigorous exercises there is no need whatever for it, so rapidly is the blood pumped from the muscles into the cavæ The action of the abdominal muscles in such cases is, moreover, *for the most part continuous* and this tends if anything to impede the return of blood from the lower extremities I do not understand Mr Barnard's remark "During vigorous exertion this sphere of skeletal muscle contracts with *each inspiration*" (my own italics)

Although there are other points which I might refer to I have already, I fear occupied too much of your space, but I trust the importance to the physician of the subjects dealt with will be considered a sufficient excuse

I am, Sirs, yours faithfully,

Wimpole-street, W, April 24th 1899 HARRY CAMPBELL

SPERMINUM POEHL

To the Editors of THE LANCET

SIRS,—My attention has been called to a circular which has been issued in French by the *Journal Russe de Chimie médic et de Pharm* The circular is an advertisement of Poehl's spermine, a drug to which it attributes universal therapeutic value It states that all reports on the action of this substance will be considered by a special international committee of clinicians and physiologists, whose names are given Those representing Great Britain are Dr Lauder Brunton, Dr W H Dickinson, McHardy, Harrison, Payne, Dr T R Fraser, and myself The use of my name in this connexion is entirely unauthorised I know nothing of the drug or of any such committee. I imagine the same must be true of the others whose names are mentioned —I am, Sirs, yours faithfully,

London, April 23rd 1899 W D HALLIBURTON

THE SICK FOREIGNER IN ROME

To the Editors of THE LANCET

SIRS,—Will you allow me to draw the attention of the profession to the serious responsibility which attaches to the recommendation of Italy as a health resort or a holiday ground owing to the absence of any proper accommodation for the reception of sick ladies in Rome? Recently called to Rome by the news that one of my daughters had typhoid fever, contracted in Sicily, I went out accompanied by a skilled nurse I found that my daughter had been moved to a nunnery, carried thither at 10 P M by the Frères Miséricordie, and was met by the Mother Superior on introducing the nurse by the emphatic declaration, "Jamais je n'admettrai une infirmière ici" I have no words but kindly and grateful ones in which to acknowledge the gentleness and kindness with which my little girl was treated by the good sisters, and my own nurse was allowed (as a friend) to take charge of the patient at night But these good ladies expect to nurse "by the grace of God," which going a long way is not sufficient in a case like this when the patient is left entirely all night and moved on to a mattress on the floor to change the bed mattress by one little nun, washed with a sponge used for all purposes, &c The magnificent clinical hospital which was shown to us five years ago at the congress in Rome is still unopened and there is no prospect of its wards being occupied Those who desire to lessen their responsibility may do so to some degree by helping forward the establishment of the Anglo-American Nursing Home referred to in a paragraph of the *Times* of last week, of which the treasurer is E F Ede, 25, Via Gregorina, Rome

I am, Sirs, yours faithfully,

JOHN H GALTON, M D Lond.

Norwood, S E., April 23rd, 1899

THE SENDING OF PHTHISICAL PATIENTS TO NATAL

To the Editors of THE LANCET

SIRS,—There is a growing practice among medical men in this country of recommending consumptive patients to go to Natal and other parts of South Africa and under certain conditions the advice is good, but there have been cases in which that advice has been followed by lamentable consequences In those cases where the disease is only threatened or has become but slightly developed and there is a reasonable prospect of recovery, provided that the patients have sufficient means of their own for their support let them go to South Africa by all means, but not otherwise

The facts should be known that as regards Natal (and the same may be said of other parts of South Africa) there is no provision for the treatment of consumptives otherwise than in the hospitals, that the expenses in cases of sickness are greatly in excess of the expenses in this country, and that the private benevolence of the small European community is apt to be overstrained It is therefore extremely undesirable that invalids in the last stage of consumption should be sent out there to die or to be sent back in a dying condition. I write this letter by desire of the Government of Natal in the hope that by its publication in the columns of THE LANCET medical men in this country may realise the position more clearly

I have the honour to be, Sirs, your obedient servant,

WALTER PEACE,
Agent-General for Natal.

Natal Government Agency Victoria street, S W.
April 20th, 1899

"THE ROYAL BERKSHIRE HOSPITAL"

To the Editors of THE LANCET

SIRS—In the annotation "The Royal Berkshire Hospital" in THE LANCET of April 15th, in the last portion of the paragraph you imply that the physicians have practised as surgeons As senior physician may I beg you to correct the error as a false impression will naturally be inferred, since there has not been any alteration of the rule whatever in this respect? The preceding physicians as well as those now holding the appointments have and do practise medicine purely and entirely —I am Sirs, yours faithfully,

CHARLES W MARRIOTT, M D St And, M R C P Lond

Reading April 25th 1899

FERMENTATION WITHOUT YEAST CELLS"

To the Editors of THE LANCET

SIRS—In reference to your annotation on this subject which appeared in THE LANCET of April 15th, in Schultzenberger's book on "Fermentation, published in England by H S King and Co (1876), there occurs at page 143 the following statement of M Béchamp "Yeast like every living organism shows phenomena of two kinds—those of nutrition and assimilation which are subordinate to the presence of its nutritious principles (sugar nitrogenous compounds, mineral salts) These various principles, penetrating by endosmose into the cell, undergo there suitable transformations, and are converted into tissues of recent formation in the new cells which are formed by budding Together with these phenomena of nutrition, and side by side with them other inverse reactions, those of disassimilation, take place, by which the tissues are changed into excrementitious products, unsuited to the life of the cell, and these are eliminated *The production of carbon dioxide and of alcohol are the consequences of this process and belong to disassimilating reactions*

I am, Sirs, yours faithfully,

J INGLIS PARSONS

Queen-street, Mayfair W April 18th, 1899

REGISTRATION OF COLONIAL DEGREES

To the Editors of THE LANCET

SIRS—A small paragraph in the report of the proceedings of the Executive Committee of the General Medical Council on Feb 27th last under the heading "Colonial Degrees," deserves the attention of all colonial practitioners and also of all those interested in the higher education of women

In 1897 Calcutta University conferred its M B degree on a woman graduate who was then awarded the "Elgin" scholarship on condition that she obtained a registrable British qualification Finding that women are not yet admitted to the Fellowship of the Royal Colleges of England and Scotland she passed the examination of the Irish College of Surgeons and received the diploma of Fellow in May 1898 Application was made to the Registrar of the General Medical Council who registered the M B degree but refused to register the Fellowship diploma on the grounds that 'a colonial qualification can be added to a name on the General Register as an additional qualification but British qualifications cannot be so added to names on the Colonial List' this is the opinion of Mr Muir Mackenzie Part 2 Section 14 of the 1886 Act states that the provisions of the Medical Act, 1858, shall apply in the case of colonial practitioners when registered under the Act of 1886 This lady *was* registered under the Act of 1886 and therefore she appears entitled to have an additional qualification added to her name on the Colonial Register under Section 30 of the 1858 Act As the non registration of this Fellowship diploma debars the holder from appointments to which she legitimately aspires and the Registrar informs me that similar applications have been refused on previous occasions, I have applied to the Privy Council for a direction to the General Medical Council so that the question may be definitely decided though as it affects many colonial students I should have preferred the application to have been made by the Irish College of Surgeons or the Scottish Association for the Medical Education of Women

I am, Sirs yours faithfully,

CHARLES FREDERICK KNIGHT, M D R U I

Edinburgh, April 20th, 1899

"A CRITICISM OF THE MORE COMMONLY EMPLOYED TESTS FOR ALBUMIN IN URINE"

To the Editors of THE LANCET

SIRS,—I observe in THE LANCET of April 22nd a criticism of the tests for albumin By an odd coincidence I had sent you on March 3rd the result of some experiments made in my laboratory on the delicacy of the common tests May I ask Mr Cammidge whether he has verified his statements himself by appeal to his chemical balance or whether he has taken his results from books? I may state that his results do not agree with the results of my experiments

May I be allowed to express the opinion without referring specially to Mr Cammidge's paper, that the prevalent craze for bibliography is against medical progress? It is supposed to show an academic mind, but it should be remembered that owing to outside pressure the academic mind is waking up to discover that it will have to change its methods to keep pace with modern progress All honour should be paid to those who have advanced medical science in the past but the details of their work, often obtained by pupils, should not be allowed to become crystallised

I am, Sirs, yours faithfully,

Glasgow April 2 th 1899 WALTER COLQUHOUN

"SECRET COMMISSIONS AND THE MEDICAL PROFESSION"

To the Editors of THE LANCET

SIRS,—Every right-minded member of the medical profession must endorse your remarks upon the subject of secret commissions between medical men on the one hand and vendors of surgical instruments on the other Apart from such illicit compact there appears to me to be another side to the question an ignorance of which may sometimes lead the public to think that a medical man has reached a basis of understanding with those who supply his wants This is especially likely to be the case as regards ophthalmic surgeons and opticians Clearly, there are advantages about sending clients to a particular optician, since one's wishes are then more likely to be respected and blunders rectified without additional burden upon the patient's purse For my own part, therefore, I generally advise my patients to get their glasses from a specified optician and, if necessary, even go to the length of dissuading them from taking my prescription into the first spectacle-maker's shop which they may chance to see after leaving my house I need scarcely add that my recommendations are the outcome not of any commission, secret or otherwise but of a wish to send people to a place where I know their wants will be properly attended to It is possible, nevertheless, that some business men may suspect another and more interested motive to lie at the root of the advice I am, Sirs, yours faithfully,

April 22nd 1899 S

EXTRA-UTERINE FŒTATION

To the Editors of THE LANCET

SIRS—The concluding paragraph of Mr O Hamilton Whiteford's paper on a case of ruptured tubal pregnancy in THE LANCET of April 15th touches a point of great importance In three cases of early rupture of tubal pregnancy the patients or their husbands have informed me that they have practised what the husband calls "withdrawal" to prevent conception, and in other cases, although neither husband nor wife would directly answer the question delicately put I have strong reason to believe that this practice was adopted The relation between the unnatural pregnancy and the unnatural coitus cannot be a mere coincidence, and I cannot but believe that the very frequent occurrence of extra uterine fœtation at the present time is the definite result of the adoption of certain means to prevent conception

Not very long since I was called to see a patient about 50 miles from the place where I live The medical man in charge as we walked from the station described the symptoms and history of the lady and said that although at first he had suspected pregnancy the husband "had offered to lay him any odds that his wife was not pregnant" Before I went upstairs to see the patient I interviewed the husband and elicited from him that his confidence on this point was due to his having adopted the practice to which

I have alluded When I saw the patient I found that the case was one of undoubted rupture of an early tubal pregnancy Another patient informed me that she had been told that it was wicked of her to go on bringing children into the world and a friend had instructed her how to avoid it. The instructions were carried out and within 12 months I was summoned to this patient with the symptoms of ruptured tubal pregnancy and had her at once removed into the hospital for operation, the necessity for which happily did not arise, the case doing well without it These and other cases have so strongly impressed upon me that there is a distinct relation of cause and effect between the unnatural coitus and the unnatural pregnancy that I have felt it my duty—where I have had reason to suspect that the practice was being adopted—to warn the husband of the risk which attached to it, and I would urge upon my colleagues, putting on one side the natural delicacy which would prevent their approaching this subject to ascertain by judicious examination whether my view of the matter is correct or not and to warn those who thus (and not by continence) seek to avoid parental responsibility, of the serious risk which the practice involves

I am, Sirs, yours faithfully,

April 18th, 1899 A PROVINCIAL SURGEON

"DIFFICULTIES UNDER THE NEW VACCINATION ACT"

To the Editors of THE LANCET

SIRS,—In THE LANCET of April 15th "Fairplay," writing under the above heading, takes a deal of trouble to prove what no one questions Of course, the practitioner who attends the mother and child for the first nine days may with advantage discuss the whole medical future of the child, and advise not only on vaccination, but on the care of the teeth and even the precautions to be taken at puberty, and it is not at all improbable that he will be then engaged to vaccinate at some future date But it is perfectly outrageous to declare that it is his duty to make a definite arrangement for the vaccination, and to say that "he must ignore the law" if it is not done How about cases attended by a midwife—a class of cases which will probably become more common when the new practitioners appear under the Midwives Act? May all the doctors in the neighbourhood call with vaccine, or are these cases to be the perquisite of the public vaccinator? Surely, one who signs himself "Fairplay" must see that it is only fair play to allow anyone to call and offer his professional services if the public vaccinator may do so But if this is allowed the rule which forbids professional touting ceases to act, and with it will go, I believe, several other rules of etiquette

I do not think "Fairplay" quite understands the foundations on which professional etiquette rests, or he would not use arguments which apply equally well against all forms I have heard many people "complain bitterly" against the etiquette which forbids advertising, and they truly point out that advertisements by the leading consultants, giving their hours, fees, &c, would be a boon not only to the public, but also in a measure to the profession They object in the same way to the rule which prevents them from calling in another opinion without first informing the regular attendant "With such collusion the second opinion is useless" they say with some truth They object equally to the rule which forbids touting and I have heard practitioners highly praised for a time because they called regularly for orders The advantages of professional etiquette are by no means immediately obvious in every case, but experience teaches that without it the profession rapidly loses its dignity and self respect, and the loss of these qualities would ultimately prove an incalculable loss to the public When we read that these visits of the public vaccinator are received with insult and contempt even a strong partisan of this iniquitous Act like "Fairplay" must surely realise that there is something wrong and must see that the work is inconsistent with the dignity of our profession As he hint d in his former letter it is policeman's work and until the parents have signified their willingness to comply with the law the medical practitioner should have nothing to do with it The "bothering" (to use "Fairplay's" own term) of the public and their fellow practitioners is work very unworthy of any of our calling, the very use of the word betrays a knowledge of the unpleasantness of the task which his letter in vain tries to conceal

I am, Sirs, yours faithfully,

April 24th, P P

Obituary.

SIR WILLIAM ROBERTS, M D, F R C P LOND, B A, F R S

WILLIAM ROBERTS was born at Bodedern, Anglesea, on March 18th, 1830 He was the seventh and youngest son of Mr David Roberts of Mynydd y gof and Sarah, daughter of Mr J Foulkes of Machynlleth, Montgomeryshire Mr David Roberts farmed his own land in Anglesea and in addition practised as a surgeon in the neighbourhood, where indeed he was the only medical man The homestead at Mynydd y gof was a well known centre of hospitality for the neighbourhood and Sir William Roberts's parents were strong supporters of Methodism, which then, as now, was a great power in Wales Both of Sir William Roberts's parents lived to a great age Several of his brothers achieved distinction in Manchester and elsewhere and one of them, Alderman J Foulkes Roberts, was Lord Mayor of Manchester in 1897 98.

William Roberts was educated at Mill Hill School and entered University College, London, as a medical student in 1849-50 He had a distinguished career as a student at University College and attracted the attention of his teachers by the earnestness and thoroughness of his work. His interest in physiological problems, which persisted throughout his life, was aroused during his early student career by the influence of the teaching of Sharpey Walshe, Garrod, Jenner Quain, Hare, and Erichsen were amongst the teachers at the time when William Roberts was a student and Wilson Fox and George Buchanan were his contemporaries, the late Sir J Russell Reynolds being slightly senior to him. Roberts was dresser to Mr Erichsen in 1851-52 when Joseph Lister, now Lord Lister, was house surgeon, and Lord Lister recalls at the present time his alertness and brightness of manner combined with great assiduity and thoroughness in all his work He graduated as B A in the University of London in 1851, taking the highest honours in chemistry and animal physiology, and became a Member of the Royal College of Surgeons of England and a Licentiate of the Society of Apothecaries in 1853 In 1853 he also took the degree of M B, obtaining the scholarship and gold medal in physiology and comparative anatomy and the gold medal in medicine at the final examination and the medal and exhibition in chemistry at the first M B He took the degree of M D of the University of London in 1854, and in 1864 was elected a Fellow of University College, London In addition to studying in the Medical School of University College William Roberts afterwards studied in France and Germany, and there doubtless he laid the foundations of his intimate knowledge of the medical literature of those countries, and to the end of his life he was thoroughly conversant with the modern advances made abroad, more especially in his own branch of medicine On returning from the Continent he was appointed in 1854 house surgeon to the Manchester Royal Infirmary, and very soon afterwards, at the early age of 25 years, he was, on July 26th, 1855, appointed without any opposition to the post of full physician to the Royal Infirmary and lecturer on anatomy and physiology in the Royal School of Medicine, Manchester This appointment is probably unique as although occasionally a medical school appoints a man as young on its staff such an appointment is rarely made without opposition He was appointed lecturer on pathology in 1861 and in 1863 lecturer on the principles and practice of medicine at the Owens College, with which the Royal School of Medicine was then united Dr William Roberts remained on the staff of the Manchester Royal Infirmary until Feb 26th, 1883 He was thus on the active staff for nearly 30 years and during the whole of this time he was an energetic teacher of clinical medicine and played a conspicuous part in the development of this great provincial school of medicine His clinical teaching, which appealed more especially to the senior and advanced students, was remarkable for its thoroughness and lucidity, and his custom was rather to investigate thoroughly at one visit two or three of the cases in his wards than to make more general and discursive remarks on a greater number The high character and efficiency of his teaching was recognised not only by the success of his pupils but also by his being appointed the first Professor of Medicine in the Victoria

SIR WILLIAM ROBERTS, M D, F R C P LOND, F R S

University when the Victoria University received a charter enabling it to confer degrees

He was admitted a Member of the Royal College of Physicians of London in 1860 and in 1865 he was elected a Fellow of the College and his connexion with that body remained singularly close throughout his life He delivered the Goulstonian Lectures before the College in 1866, the subject being the Use of Solvents in the Treatment of Urinary Calculi and Gout. He gave the Lumleian Lectures in 1880 and served on the Council in 1882, 1883, and 1884 He was a Censor in 1889 and 1890 Croonian Lecturer in 1892, and Harveian Orator in 1897 In the Lumleian Lectures on the Digestive Ferments and on the Artificially Digested Foods Dr William Roberts brought together the results of an investigation on the digestive ferments extending over many years These lectures and the work on which they were based probably form one of the most exact contributions in our language to a subject which is not only of great theoretical interest but of everyday importance in practical medicine This happy combination of exact scientific inquiry on the one hand and the recognition of the needs of practical medicine on the other was perhaps one of the main characteristics of all his work His original work on the digestive ferments dealt more especially with the activity of pancreatic extracts and the nature and conditions under which the digestive ferments produced their action on the starchy and proteid constituents of the food He elaborated his conclusions on this subject in a paper on the Estimation of the Amylolytic and Proteolytic Activity of the Pancreatic Extracts communicated to the Royal Society in 1881. He also developed the practical side of this question in a series of five lectures delivered at Owens College in 1885 and subsequently published in 'Lectures on Dietetics and Dyspepsia," and in 1891 in his work on Collected Contributions on Digestion and Diet he again brought up to that date the whole of his work in this branch of physiology and medicine

In the Croonian Lectures in 1892 on "The Chemistry and Therapeutics of Uric Acid Gravel and Gout" he made most important contributions to our knowledge of these disorders This work, like that recorded in the Lumleian Lectures, was the result of a long series of observations characterised by extreme precision in execution and great originality of conception. His observations on the relationship existing between the forms in which uric acid exists in the blood, in the urine, and in gouty deposits were most interesting and instructive Although Sir William Roberts made no contribution to the question which is at present exciting some attention as to whether uric acid exists normally in the blood or not, his experiments showed conclusively that if it did it would be present in the form of a quadriurate, and he demonstrated in the most interesting manner how these quadriurates, as the result of comparatively simple chemical interchanges, could be decomposed with the formation of the acid urates which are so characteristic of gouty deposits He further demonstrated that by other chemical decompositions the quadriurates might readily liberate free uric acid. He showed that uric acid when dissolved in an alkaline medium such as the blood serum or an artificial serum was dissolved in the form of a quadriurate, and that, provided the quantity dissolved was sufficient and the reaction of the medium suitable, this quadriurate in the course of a variable time decomposed, liberating an acid urate, and that the rapidity of this decomposition was more especially favoured by the amount of bicarbonate of soda and sodium chloride and other salts present in the medium. In other words, given the presence of a quadriurate in an alkaline fluid such as the blood plasma, sooner or later, as the mere result of chemical interchanges provided a sufficient quantity of the quadriurate was present, a decomposition of the quadriurate must take place with the formation of the more insoluble acid urate He showed further that in certain fluids such as synovial fluid this decomposition occurred more quickly than in others By these experimental observations an important contribution to our knowledge of a portion of the pathology of gout was made Similarly his observations on the conditions determining the precipitation of uric acid in the urine threw great light on the nature of gravel, since his experiments established the fact that the quadriurates in an acid medium like the urine readily decomposed, liberating free uric acid and that this decomposition was profoundly affected by such conditions as the reaction the amount of salts present the quantity of pigment, and so forth He demonstrated that a great many other factors were concerned in the formation of gravel besides a mere excess of uric acid in the blood or in the urine and that the degree of concentration and the reaction of the urine were factors as important as the mere excess of uric acid In this way he afforded a most satisfactory explanation of a well known fact—that dilute urines often deposit uric acid abundantly, whereas in concentrated urines with an abundance of saline ingredients a deposit of urates occurs

In the Harveian Oration delivered in 1897 he took as his subject "Science and Modern Civilisation" elaborating a theme which had been present to his mind for many years on the differences between the foundations of modern and ancient civilisations, the latter resting more on art, the former on science He held strongly the view that modern civilisation was for this reason more stable and less liable to be destroyed by barbaric invasion than was the case with Roman and Grecian civilisation

In 1865 Dr William Roberts brought out the first edition of his work, 'A Practical Treatise on Urinary and Renal Diseases" This work was a most important contribution to English scientific medicine, as notwithstanding the able productions of former writers on the subject there was no book in the English language which contained such a complete account not only of the more common but also of the rarer forms of renal disease To illustrate this it is sufficient to refer even at the present time to the chapters on Cystic Diseases of the Kidney and on Chyluria This work, however, made the reputation of its author, not only on account of its containing a vast amount of valuable information collected from various sources with reference to renal diseases, but perhaps more so on account of the abundant evidence which it contained of the original work of the author It is not often that a text-book produced by a practical physician is quoted as authoritative on physiological questions by the writer of a text-book on physiology, but the work that Dr Roberts carried on with reference to the facts of calculous anuria and the light which this threw on the physiology of the kidney were such as to call for remark in Professor Michael Foster's well known text-book Dr William Roberts showed that when the functions of the kidney were arrested owing to obstruction of the ureters a peculiar train of symptoms was produced which differed in many respects from the uræmia of Bright's disease, and however difficult the explanation of this may be the fact remains that not only was it an important contribution to practical medicine but it was of equal importance to the physiologist Although probably the chapter on Suppression of Urine in this well known text book is the one which contains the most striking evidence of original observation, yet there are records of many other original experiments, such as those on the diurnal variations in the acidity of the urine, and numerous observations on the estimation of sugar in the urine by fermentation and also several tests and improvements of tests for the recognition of proteids and sugar in the urine. His experiments on the estimation of sugar by variations in the density of the urine after fermentation afford again a striking instance of the character of the man's work, the painstaking accuracy, the neatness and simplicity of the method, and the exactness of the results obtained all show the striking capacity that he had as an original observer During his last illness and up to a short time before his death he was greatly interested in a further modification which he had devised in this method and on which he was still making observations The 'Practical Treatise on Urinary and Renal Disease rapidly reached a second edition and the fourth edition was published in 1885 Without disparaging any of the other numerous works it may be fairly said that it was the most important work produced on this subject in the last 30 years He also contributed articles on 'Wasting Palsy" and "Diseases of the Kidney" to Reynolds's System of Medicine on 'Renal Diseases' to Quain's Dictionary of Medicine, and on "Gout" to Allbutt's System of Medicine

Dr William Roberts was elected a Fellow of the Royal Society on June 7th, 1877 and he served on the Council in 1890-91 His researches in histology, physiology, and pathological chemistry were the grounds for this honour His most important papers communicated to the Royal Society were—(1) 'On Peculiar Appearances exhibited by Blood Corpuscles with Solutions of Magenta and Tannin" (Proceedings of the Royal Society 1863), and (2) 'Studies on Biogenesis," published in the Philosophical Transactions

for 1874 The former paper dealt with the staining reactions and structure of the blood corpuscles and the peculiar manner in which tannin causes the hæmoglobin to be extruded, and the results detailed in this paper were used for the next 30 years in the routine instruction of succeeding generations of medical students In the paper on Biogenesis Dr Roberts broke new ground, and this research dealt with the question of spontaneous generation and of what was known in those days as the "panspermic" hypothesis He records a number of most carefully devised experiments with reference to the sterilisation of liquids, such as milk, urine, hay infusion, &c , and the conditions affecting the sterilisation and the growth of bacteria in such liquids, such as the intermittent application of heat, the degree of heat necessary discontinuous sterilisation, &c He also deals with the influence of the reaction of the medium, showing by many ingenious experiments that alkaline nutritive media were far more difficult to sterilise than acid His paper is most interesting reading at the present day when we remember the great advances which have been made in sterilisation and in bacteriology The conclusions arrived at in the paper communicated to the Royal Society were further developed in the year 1877 on the occasion of the British Medical Association visiting Manchester, when he gave an address on medicine, taking as his subject "Contagium Vivum and its Application to Medicine" Sir William Roberts's scientific work thus covered a very wide field, but whether dealing with histology, physiology, or practical medicine all the work was characterised by the same scrupulous accuracy and those who knew him well know the great number of control experiments of various kinds which were carried on often for years prior to any publication being made It must be also remembered that all this scientific work was carried out during a period when the author was actively engaged in a large and rapidly increasing consulting practice in Manchester The above short review of his work would not be complete without drawing attention to his first publication, an "Essay on Wasting Palsy," published in the year 1858 which was characterised by the same thoroughness and which affords further evidence that he was in no sense a specialist but took a broad view of medicine This essay was the first systematic treatise on this disease in the English language

In 1879 Dr Roberts received the Cameron Prize for his contributions to practical therapeutics, more especially in relation to the dietetic treatment of disease and at the meeting of the British Medical Association at Cardiff in 1885 he delivered an address on "Feeding the Sick" In 1895, when the Association met in London, he was President of the Section of Pharmacology and Therapeutics In 1885 Dr William Roberts, greatly to his own surprise and without any previous communication to him, received the honour of knighthood, the first intimation of his preferment being a paragraph in a Manchester paper The medical profession in Manchester and the surrounding district entertained Sir William Roberts at a banquet at the Queen's Hotel in celebration of this event In 1889 Sir William Roberts removed to London chiefly to obtain more leisure from the incessant calls of a very large consulting practice, and during the last 10 years of his life, whilst maintaining his interest in, and actively pursuing, several branches of scientific inquiry, he embarked on a new career of usefulness in the more official and administrative departments of the profession In 1892 he was appointed a Fellow of the University of London and soon afterwards became an active member of the Brown Committee, a sub-committee of the Senate of the University of London having the general management of the Brown Institution His interest in this institution was great and on the death of Sir Richard Quain in 1897 he was unanimously elected chairman of the Brown Committee, a post which he retained until November, 1898 He represented the University of London on the General Medical Council from 1896 to the time of his death and his keen interest in the great question of the provision of adequate university teaching in London was recognised by his appointment as a member of the Statutory Commission appointed in 1898 to deal with this matter His rapid failure of health caused him to resign this but a few weeks ago In 1893 he was appointed the medical member of the Opium Commission He always looked back on his experience in India on this Commission as one of the most interesting events of his life He took a broad view of the opium question, largely founded on the result of his keen observation of its supposed ill effects, whilst in India In addition to carrying out the routine work of a Commissioner he found time to bring before the profession the value of anarcotin as an anti periodic In addition to serving on the Opium Commission Sir William Roberts in 1897 served on a committee appointed by the Home Office to investigate the question of the effects of moisture in weaving sheds on the health of the workers, and Sir Henry Roscoe, who was one of his colleagues in this inquiry and a life-long friend, having been a fellow student with him at University College, writes "One of the last as well as one of the most important subjects as influencing the health of the people in which Roberts took the greatest interest was a Home Office inquiry in 1897 into the effect of the use of steam in weaving sheds upon the health of the operatives in the Lancashire cotton mills Sir William Roberts became my colleague together with Dr Arthur Ransome, F R S , and all three being Manchester men we were well acquainted not only with the district but with the habits of the people The evidence obtained and the report and recommendations sent into the Home Office were of so satisfactory a character that all danger of dispute between employers and employed, which at one time threatened to be serious, has been removed To this end the high scientific abilities, professional knowledge, and sound common sense of Sir William Roberts greatly contributed"

Although the long record of Sir William Roberts's scientific work and professional attainments is more than sufficient to account for the esteem in which he was held by his fellow practitioners, yet it was more especially the singularly affectionate and gentle disposition that lay behind an apparently reserved exterior which endeared him to a wide circle and which causes many to feel that his loss is irreparable All those who have been privileged to know him will miss the kindly wit that sparkled on every occasion and his friends know that it is no exaggeration to say that he was never known to express a harsh sentiment of anyone Further, he was a man of the highest principles and his professional conduct was characterised by the greatest integrity Sir William Roberts married in 1869 Elizabeth daughter of Mr Richard Johnson This lady died in 1874 leaving as issue one son who died in 1893 During the last 20 years Sir William Roberts invariably spent some portion of every year at his country residence, Bryn, where he took the greatest interest in developing his estate He was very solicitous for the comfort and well being of his tenants, providing them with model farmhouses replete with modern improvements He was very fond of country pursuits and in addition devoted a good deal of his time to the study of the flora of the district He was also a keen fisherman and the river Dovey, flowing past his house, afforded him excellent sport

Sir William Roberts suffered severely from influenza some two years ago and although in the course of time he recovered his usual alertness of manner, in the autumn of 1898 serious symptoms of ill health developed which in November were recognised to be dependent upon a severe internal affection The malady slowly progressed until death occurred on April 16th The funeral took place at Llanymawddwy, Merionethshire, the village adjoining his country residence, Bryn, to which he was so attached on April 19th, and was attended by his immediate relatives and a large concourse of friends, tenants, farmers of the neighbourhood, and schoolchildren bearing primroses Dr Thomas Harris (a former house physician under Sir William Roberts) and Professor Thomas Jones attended as representatives of the Medical Board of the Manchester Royal Infirmary Professor Jones in addition represented the Senate of Owens College, and Mr Matthews of Levenshulme attended as one of his old Manchester pupils

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THOMAS NEDLEY, M D KING'S COLL ABERD

DR THOMAS NEDLEY, whose death occurred in Dublin on Tuesday last at an advanced age, was a well known Court and public official and had for many years enjoyed a large private practice He received his medical education in Dublin and Edinburgh and later in 1856 graduated in medicine at King's College, Aberdeen Dr Nedley was for many years surgeon to the household of the Lord Lieutenant of Ireland and medical officer to the Irish Educational Board He also held until recently the post of medical officer to the Dublin Metropolitan Police He was widely known in Irish society as a wit and *raconteur*

WILLIAM HOPKIN THOMAS, M D ST AND, M R C S ENG, L R C P EDIN, J P

DR WILLIAM HOPKIN THOMAS died at his residence, Bronygarn, Maesteg, Glamorganshire, on April 13th, in his 59th year The deceased received his medical education at King's College Hospital, London, and took the qualifications of M R C S Eng and L R C P Edin. in 1863 and 1870 respectively He graduated M D St. Andrews in 1894 Dr Thomas had a large practice at Maesteg where he had resided for the past 33 years He was formerly medical officer to the Maesteg Local Board and also surgeon to several collieries Dr Thomas was a magistrate for Glamorganshire and had been a member of the Maesteg District Council for several years The deceased was highly respected in Maesteg and the district, he leaves a widow with seven children, for whom much sympathy is felt

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DEATHS OF EMINENT FOREIGN MEDICAL MEN —The deaths of the following eminent foreign medical men are announced —Dr G L K Zedelius, who is described as the foremost of the German medical practitioners in Shanghai He was chief medical officer of the hospital and was attached both to the German and Austrian Legations as medical attendant He was 46 years of age —Dr Joseph Engel, who was assistant to Rokitansky until, about 50 years ago, he was appointed Professor of Pathological Anatomy in Zürich Thence he migrated to Prague, where he was professor of the same subject, and from there he returned to Vienna, where he held the corresponding chair, not in the university, but in the Josefs Academy, the Military Medical School He had been in retirement for several years and was in his 84th year —Dr Alfred Graefe formerly Professor of Ophthalmology in the University of Halle In early life he was assistant to his very eminent relative, Albrecht von Graefe He was obliged to resign his chair some seven years ago on account of ill health He published a number of papers on diseases of the eye and in conjunction with Dr Saemisch a large Handbook of Ophthalmology —Dr Hüllmann of Halle, to whom the profession in Germany is much indebted for his activity in the region of medical politics —Dr Eugen Seitz who is well known as the author of a manual of Percussion and Auscultation and also from his connexion with Niemeyer's classical Handbook of Medicine He was 82 years of age and died in Wiesbaden where he had lived for many years in retirement —Dr Theodor Neureuther, Professor of the Diseases of Children in the Bohemian University of Prague —Dr W W van Arsdale Professor of Surgery in the New York Polichnic and Hospital —Dr J A Benson, Professor of Physiology in the College of Physicians and Surgeons, Chicago

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THE GERMAN SURGICAL CONGRESS

(FROM OUR BERLIN CORRESPONDENT)

THE twenty eighth congress of the German Surgical Association was opened on April 8th in Langenbeck House, Berlin, the president being Professor HAHN of Berlin

Loose Cartilages in the Joints

Professor KONIG (Berlin) read the first paper, the subject being Loose Cartilages (Gelenkkörper) in the Joints He had seen 70 cases of this condition, eight of them being caused by arthritis deformans and 16 as the result of injury With the exception of 10 cases all of them involved either the knee or the elbow The great majority of the patients were young and all of them with the exception of three were of the male sex There are as a rule rheumatic pains in different joints The function of the joint is deranged, the power of extension being especially interfered with In the first stage the adventitious body is attached to the cartilages so that it is sometimes difficult to remove it, in the second stage there is only a loose connexion with the cartilage and finally no connexion at all In rare cases the free bodies may be absorbed The etiology of the condition is not entirely known Sometimes it follows injury but in experiments made on dead bodies Professor König did not succeed in loosening any cartilaginous fragments The diagnosis is made easy by skiagraphy

Indications for Operations in Epilepsy

Professor KOCHER (Berne), speaking on this subject, said that current opinion as to the possibility of curing epilepsy by an operation was much less hopeful than formerly The statistics published by Dr Graf and Dr Braun showed a successful result in only from 2 to 4 per cent of the cases The excision of the cortical centre suggested by Professor von Bergmann was a real improvement, so that the results were now better The essential point is to diminish intracranial pressure and the dura mater ought therefore to be incised in every instance By this method a permanent cure was obtained in 54 per cent of the cases In the cured cases he had found that the wound in healing had formed a soft and yielding cicatrix, whilst in cases which relapsed the cicatrix was very dense The influence of increased pressure in producing epilepsy was made obvious by experiments on guinea pigs and the increase of pressure was demonstrated by a cannula introduced through the cranium Foreign bodies introduced into the brain did not produce the disease Sequestra must of course be removed, but the principal thing is to diminish pressure by excising pieces of the dura mater the hole must not be made too large — Professor VON BERGMANN (Berlin) said that epilepsy was caused by the so called "spasmophilic" state of the brain, and that 90 per cent of the cases were hereditary Operations were successful only in the non hereditary cases With regard to reflex epilepsy he was of opinion that in hereditary cases epileptic convulsions caused, for instance, by a cicatrix in the sciatic nerve would persist even after the removal of the cicatrix, whilst in cases independent of heredity the operation might be successful The only reliable operation was excision of the cortical centre A definite opinion as to the success of the operation ought not to be given too early as he had seen a fatal issue even four years after the operation

Porencephaly

Professor VON BERGMANN said that four symptoms were characteristic of porencephaly—paresis and contractures, stunted growth of the extremities, epilepsy, and idiocy He showed a young girl with a defect in the cranium in whom the above symptoms had been present The aperture was closed by a plastic operation and the epilepsy ceased A small cyst in the cortex communicating with the lateral ventricles was drained, but when the drain was removed the convulsions reappeared

Recovery from Gunshot Wound of the Brain

Mr A E BARKER (London) reported the case of a man who had attempted suicide by firing a seven millimetre revolver bullet through his palate into the skull There was at first only a little hæmorrhage from the nose and ptosis of the right side without loss of consciousness On the twelfth day he vomited and on the twenty eighth day there was hemiplegia On the thirty second day he was admitted into University College Hospital, London, with paresis of the left side The patellar reflexes were increased and there was some vomiting, but there were no convulsions and no difference between the pupils On the forty second day the man's state had improved By the Roentgen rays two bullets were seen, one being lodged in the corpus callosum and the other on the sphenoid bone On the sixty fifth day the patient had a severe epileptic fit preceded by giddiness and loss of consciousness On the sixty-eighth day two fits occurred with convulsions, especially of the left side On trephining it was found that there was considerable intracranial pressure and the bullets were removed After the operation paresis of the left side returned but became better on the following day The patient is now apparently recovered

Professor KRONLEIN (Zürich), Dr KÖSTL (Berlin), Dr. LAUENSTEIN (Hamburg), and Dr VON BECKH (Carlsruhe), reported other cases of operation on the brain

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SECOND DAY

Resection of the Vertebral Arches in Spondylitis

Professor TRENDELENBURG (Leipsic) said that paresis of the extremities in spondylitis was caused by spinal pachymeningitis and operation should be resorted to when there was extradural exudation Of 27 patients formerly treated in the Leipsic Hospital more than 80 per cent died Of those operated upon one died eight months after having left the hospital, four recovered one was not improved, and three were still under observation The operator having made a large semicircular incision over the protuberance removes the skin and the muscles from the bone and then resects the vertebral arches with Luer's forceps It is necessary to remove the vertebral arches over the whole of the

compressed dura mater, the wound is then closed by sutures In all the cases healing took place by first intention Professor Trendelenburg summed up as follows (1) paresis in spondylitis is caused by compression, (2) the compression is due either to pachymeningitis or to narrowing of the vertebral canal, (3) cases in the first stage should not be operated upon, and (4) success is possible even in very old standing cases, the symptoms in one of his patients who recovered extending back to 17 years ago

Micro organisms in Wounds

Dr FRIEDRICH (Leipsic) said that it would be of interest to know whether the micro-organisms in wounds were immediately taken up by the circulation and whether they grew at once in the wound even during operations The second question must be answered in the negative, in open vessels filled with blood serum kept at the temperature of the body and covered after a certain time Dr Friedrich found that the bacteria did not commence to grow for seven hours The degree of pressure under which the virus is introduced into the wound is very important It has been found, for instance, that the stump of the amputated tail of an animal when only dipped into a virulent culture of anthrax bacilli did not become infected, whilst injections made with the same culture killed the animal at once

Latency of Micro organisms

Dr SCHNITZLER (Vienna) said that pathogenic micro-organisms were often found in apparently healthy persons, and were especially apt to persist for a long time in convalescence after infectious diseases This fact is of interest for the surgeon as explaining the relapsing form of osteomyelitis Dr Schnitzler found staphylococci in the scar in a case of osteomyelitis two years after healing had occurred When micro organisms were injected into the veins of animals he had found them after several weeks in the bone marrow and by fracturing a bone he was able to produce acute osteomyelitis 29 days after the injection

Noma

Dr PERTHES (Leipsic) has made a bacteriological examination of two cases of noma In the necrotic tissue there was of course a great mass of bacteria of various kinds, but at the margin of the necrotic part near the healthy tissue he found a micro organism very similar to streptothrix and possessing a mycelium These micro organisms were present in both cases but only at the margin, inoculation of them into dogs gave rise to a slight necrosis but not to noma Dr Perthes, however, is of opinion that these micro organisms are the specific cause of noma

"Gangrene Foudroyante"

Dr LINDENTHAL (Vienna) has observed six cases of this comparatively rare condition As a rule it results from extensive lacerations of the extremities where the wounds have come into contact with earth or dust Within 48 hours after the injury there occur diffuse œdema of the extremities, cyanosis of the skin, large vesicles on the skin, loss of sensation, and a peculiar crepitation of the tissues The patient's general state is very bad and jaundice is very frequent The anatomical changes consist in a progressive necrosis accompanied by the formation of gas In five of the six cases he discovered an anaerobic bacterium and in the sixth case bacterium coli commune Early amputation may perhaps save the patient, but death occurs in the great majority of cases

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

The Spread of Plague — Vital Statistics — The Jigger in Bombay — The English Plague Sisters

WHILE the severity of the plague epidemic in India is not so marked (2689 deaths for the week ending April 1st) the disease seems to be spreading far and wide Many fresh places have been attacked Cases have occurred at Amritsar, at Falna at Hyderabad (Sind), at Gurchah, at Nagpore, in the Jullundur district, and in the Bhagulpur district Many places in the Bengal Presidency are showing evidences of the disease for the first time The official account of plague in India gives the following figures, but they are probably much under the correct numbers Bombay (and Sind), 2051, of which 992 are entered for Bombay city, Baroda, 142, Karachi, 213, and Thanu, 132 In the Madras Presidency it seems quickly declining, only 50 cases being recorded, of which North Arcot furnished 30 There were 108 in Mysore, 33 in Hyderabad (Deccan), and five in the Punjaub In the Bengal Presidency there were 370, of which 191 were furnished by Calcutta, 13 in Darbhunga, 24 in the 24 Parganas, and 74 in Saran In Karachi the disease seems to be spreading notwithstanding that the outbreak has already lasted nine weeks. In Poona, however, it keeps about stationary In consequence of the plague having infected several places in the Bengal Presidency and being on the increase in Calcutta quarantine regulations have been instituted in Colombo In Bombay there are indications of improvement, but the mortality is still terribly high, the rate for the past week being over 130 per 1000 per annum

The differences of mortality among the various races and castes are interesting They stand as follows Jains, 144 3 per 1000 per annum, Brahmins, 93, caste Hindus 159 6, low caste Hindus, 227 9 Mahomedans, 122 7, Parsees, 56 9, native Christians, 106 0, and Europeans, 32 2. The Mahomedans and the low caste Hindus seem to give false returns as to the causes of death very frequently, for notwithstanding their high rate of mortality very few cases comparatively are returned as plague The outbreak of measles in Bombay is increasing, but I suspect that many cases of plague are recorded under this disease Relapsing fever also continues prevalent, but diseases of the respiratory system seem to be most popular for covering deaths from plague Judging from the number of births there is no reason to suppose that the population is above the average. In Poona, however, there is said to have been a great exodus nearly half the town being empty

In Calcutta the epidemic is only slowly increasing notwithstanding that the cases seem scattered all over the city The average normal death rate is 45 3 per 1000 per annum for Calcutta, but it is now raised to 54 4 All persons connected with the Government of India proceeding to Simla have been very carefully examined and will be kept under observation for 10 days Measures have recently been instituted for the examination of all passengers out of Calcutta, both by rail and boat, with the object of protecting the Mofussil As, however, this is already and considerably affected the arrangements come much too late Moreover, as the examination of passengers is hasty and superficial only persons who are markedly ill can be recognised An exodus of natives from Calcutta has commenced notwithstanding the attitude of non interference taken by the authorities Large numbers are leaving by routes other than those generally used in order to avoid medical inspection The Marwaris are the chief offenders in this respect

Minor disturbances are continually occurring at different places in connexion with plague operations, but a somewhat serious one is reported from Nagpore Plague officers of high rank were stoned and were obliged to take refuge in the Mayo Hospital A washerman's child was being removed to hospital when the disturbance commenced There is a strong and widespread feeling among the poorer classes in Nagpore against the plague regulations which is fostered by some of their richer brethren and all sorts of false rumours are maliciously circulated

Various rumours have been put about in Calcutta as to supposed forthcoming regulations, which have created a feeling of discomfort among the native population, and it will not be surprising if disturbances occur here also

Twelve patients are suffering from jigger in the Goculdas Tejpal Hospital, Bombay, the disease having been newly imported from British East Africa Jigger is a very minute flea and the disease is caused by the fertile female which burrows under the skin Any part of the body may be attacked but the feet are usually infested mainly between the toes and near or under the toenail The presence of the insect under the cuticle is at first marked only by a minute black spot which may be invisible without a magnifying glass especially in a dark skin. The parasite soon enlarges to the size of a small pea by development of the egg sac which when mature looks like a drop of pus beneath the cuticle with the body of the flea as a black spot in the centre If left alone the sac bursts and the eggs escape Severe pain attends the presence of the parasite and troublesome ulceration may follow Captain Kilkelly I M S, first reported that jigger had firmly established itself at Mombassa and when his regiment was voyaging to Bombay no less than 26 cases occurred He

thinks that there is no reason to doubt the probability that this insect will establish itself in India There are Government resolutions regarding the measures to be taken to prevent the importation of jigger into India and the attention of civil surgeons and others has been drawn to them It is important to treat promptly cases in which the abscesses have not burst in order that the chances of the flea's eggs being scattered may be diminished by breaking the egg sac

The *Englishman* of Calcutta in a leading article thus refers to the treatment of the English plague sisters "The sisters engaged by the Secretary of State for plague work in this country are fast returning home as their term of agreement with the Indian Government ends They find more money is to be made at home and probably the best of them will be leaving at the end of this year Rs 175 per mensem is the pay (less income tax) of these hard working women who daily risk their lives for a pittance which barely covers their expenses A few are paid Rs 250 and Rs 300 per month and it is to be hoped that the Indian Government will see its way to paying all these ladies an equivalent sum It must if it wishes to retain any really good nurses It was the wish of the Bombay Government to increase their pay but the Surgeon General of Bombay considered that they had enough" As I have said before the work is severe the climate is trying, and the pay is insufficient. The insufficient pay is not the only complaint and there is a vast difference in the way in which they are treated by the various authorities

April 6th.

LIVERPOOL

(FROM OUR OWN CORRESPONDENT)

The Opening of the School of Tropical Diseases by Lord Lister

THE School of Tropical Diseases was inaugurated on April 22nd by Lord Lister with *éclat* and the ceremony was graced by the presence of distinguished guests from all parts of the Kingdom The provision made at the Royal Southern Hospital for the reception and treatment of tropical cases in the Samuel Henry Thompson ward includes all that can be desired and reflects much credit on the committee and the medical staff The inaugural banquet held at the Adelphi Hotel in the evening, with Lord Lister as principal guest, passed off in a highly successful manner Mr Alfred L Jones (the chairman of the School of Tropical Diseases) made a genial chairman The speeches were of a high order and were enthusiastically applauded

University College, Liverpool Post Graduate Courses

Post-graduate courses in pathology bacteriology, morbid histology, and neuro-pathology have been arranged for the ensuing summer term The courses will commence on the first week in May and will be delivered by Dr J H Abram, Dr W B Warrington, and Dr Grünbaum The fees charged for the courses on bacteriology and morbid histology will be two guineas each and for neuro-pathology one guinea. A fee of four guineas will be charged for all three courses The course in bacteriology will include methods of investigation as applied to diagnosis, that in morbid histology methods of preparations and a study of the more common morbid conditions, and that in neuro-pathology the methods of investigation and the etiology, anatomy, and diagnosis of common nervous diseases

Mr Mitchell Banks, F R C S Eng, LL D

The news of the honour conferred on Mr Mitchell Banks, Emeritus Professor of Anatomy University College, Liverpool, by the University of Edinburgh giving him the honorary degree of LL D at the Spring Graduation ceremonial has been received with much gratification in Liverpool, where Mr Banks s ability and high qualities are fully recognised In the department of surgery Mr Banks has attained a pre-eminent position as practitioner, teacher and writer But more important if possible, than his contributions to scientific surgery is the work which he has achieved as a pioneer and harbinger of medical education in Liverpool To his efforts in a large measure have been due the calling into existence of the Liverpool School of Medicine which is now in such a flourishing condition He has represented the Victoria University on the General Medical Council and has received every honour which the medical profession in Liverpool could accord to him Mr Banks is an Edinburgh graduate in medicine and, to quote the terms of recommendation used by Sir Ludovic Grant, the dean of the faculty of law in the University of Edinburgh his career has reflected lustre upon the Edinburgh School of Medicine

Liverpool Queen Victoria District Nursing Association

The committee of this association have made arrangements for a small staff (which will be increased if necessary) of trained nurses who will make daily visits as required, or attend operations, &c, on payment of from 7*s* 6*d* to 10*s* 6*d* for one daily visit or from 10*s* to 20*s* for two daily visits, according to the time occupied in each case Moderate charges are made for assistance at operations and for laying out the dead There is also a scale of charges for one whole day or one whole night visit A fee of 2*s* 6*d* is charged for a single visit These nurses are quite distinct from the district nurses, whose services, being entirely gratuitous, are intended only for the sick who cannot afford any payment The scale of fees has been arranged as low as is consistent with the maintenance of the staff in a thoroughly efficient state The committee have purchased a commodious house in Prince s-road which will serve as the central home The neighbourhood is highly respectable and its surroundings are very healthy

Health of Liverpool

Influenza is still prevalent in Liverpool, although there is a diminution as compared with the few preceding weeks Amongst the cases under treatment at the city hospitals last week were 267 of scarlet fever, 52 of typhoid fever, and 20 of diphtheria The death rate is considerably lower than at this time last year A wholesome rule prevails at this period of the year when owners of small property receive notices to whitewash the exterior of court houses found to be in a filthy state—the medical officer is placed in a position to take legal proceedings when his notices to that effect are disregarded

April 25th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS)

Health of Edinburgh Medical Officer s Annual Report

SIR HENRY LITTLEJOHN, medical officer of health of the city of Edinburgh, has recently issued a long and interesting report on the health of the city during 1898 The population of the city for the year is estimated at 295 628, an increase of 3264 on the previous year Since the census of 1891 there was an increase in the number of inhabited houses amounting to 10 866 The birth rate during the year was 27 38 per 1000 The birth rate in Glasgow, Greenock, Aberdeen Leith, and Dundee was higher than that of Edinburgh Greenock headed the list with a birth rate of 35 2 The percentage of illegitimate to total births in the eight principal towns stood at the following rates Dundee, 9 2, Aberdeen 8 7, Edinburgh 7 4, Perth 7 3, Glasgow, 6 4, Paisley, 5 9, Greenock, 5 2, and Leith, 4 9 per cent The death rate per 1000 of the population was 19 6, but this figure can hardly be taken as the death rate of the city, as it is seen from the statistical tables appended that of the 1521 deaths which occurred in the public institutions 377 were those of persons not usually resident in Edinburgh, while among the deaths occurring throughout the city 95 were those of temporary residents The year was to be regarded as a favourable one both as regards climatic conditions and freedom from any excessive mortality from zymotic diseases As regarded the housing of the poor much had been done in recent years but there were still many areas demanding reconstruction, on two of these, Simon square and Greenside, he had already reported to the Town Council. Examining the death rate in children it was seen that of the total of 5320 deaths 1805 occurred among children under five years of age and of these 1140 were those of children under the age of one year—that is to say 140 children died under the age of one year to every 1000 born This mortality was largely preventable as it was in large part due to neglect on the part of the mothers or to injudicious feeding As so many deaths in children occurred from the sequelæ of zymotic diseases he thought that it might be of advantage to distribute a handbill to all families where these diseases

existed, pointing out any special precautions which were advisable The causes of death in the city were as follows measles, 134 deaths, scarlet fever, 72 deaths, typhus fever, 9 deaths, whooping cough, 124 deaths, diphtheria and membranous croup, 38 deaths, enteric fever, 27 deaths, influenza, 93 deaths, diarrhœa, 104 deaths, cancer, 267 deaths, tuberculous diseases, 762 deaths, diseases of the nervous system, 631 deaths, diseases of the circulatory system, 569 deaths, diseases of the respiratory system, 929 deaths, premature birth, 167 deaths, old age, 253 deaths, and accidents, 135 deaths

The records of the notification of infectious diseases during recent years tended to show that a marked reduction had taken place in the prevalence of enteric and typhus fevers in the last 10 years This could not, however, be said with regard to diphtheria, scarlet fever, and measles After freedom from small pox for two years seven cases had occurred in 1898 The infection had been primarily brought by a sailor from Bordeaux and all the seven cases were traced to this source One patient died—a woman, aged 60 years, who had not been vaccinated An epidemic of typhus fever had occurred during the year, resulting in 79 cases with nine deaths The source of infection could not be stated with certainty, but suspicion attached to a "wake" which was held in September in a small, dark, dirty house in connexion with the body of a man who was said to have died from pneumonia, six people at least who were present at this "wake" became ill In the case of three of these influenza was diagnosed and they were treated at home, the other three were at first supposed to have typhoid fever, but on removal to the City Hospital it was found that they were suffering from typhus fever The experience of this epidemic had impressed upon Sir Henry Littlejohn (1) that typhus fever is as virulent as in the former epidemics, (2) that isolation in hospital is necessary, (3) that persons in close contact with the patient should be kept in quarantine for at least 14 days, and (4) that typhus fever is non infective at moderate distances, only those who have been in intimate contact with the patient being infected The disease had not been observed to spread through tenements, even when a case had occurred in a crowded building, except when the neighbours had been visiting the patient

Edinburgh Institution for the Relief of Incurables

The annual general meeting of the subscribers to the Institution for the Relief of Incurables in their own homes was held in Edinburgh on April 21st, Dr James Andrew, President of the Royal College of Physicians of Edinburgh, being in the chair 65 vacancies had occurred during the year on the annuity list which had been filled up by the directors after careful examination of 229 applications The number of annuities was therefore 540, the same as last year, each of them amounting to £2 quarterly The subscriptions for 1898 amounted to £2041 0s 4d, being an increase of £80 14s 10d over 1897

Pharmaceutical Society of Great Britain

At a meeting of the executive of the North British branch of the Pharmaceutical Society of Great Britain held in Edinburgh on April 21st it was unanimously agreed "that this executive cordially approves of the action of the council in taking steps to oppose the Lord Chancellor's Bill, 1899, and resolves to use every endeavour to assist the council in their action"

The Question of Lunatic Asylums in Forfarshire

On April 21st a special meeting of the Forfar District Lunacy Board was held in Dundee, the subject under consideration being the decision of the General Board of Lunacy to erect Dundee Parish Council into a separate lunacy district After considerable discussion, in the course of which the chairman, Colonel Rait, stated that only two courses were open to them, either to acquiesce or to appeal to the Secretary of State for Scotland, the clerk, Sir Thomas Thornton, said the result of the decision by the general board would be to compel the parish council to erect a new asylum and to assess Dundee for it, which assessment would amount to 1s in the £ Another member of the board, however, asserted that instead of an increase there would be a reduction of 2s 6d in the assessment Finally, it was decided by four votes against two to appeal against the order to the Secretary of State for Scotland

Interment of Surgeon-Major General Webb

On the afternoon of April 22nd the remains of Surgeon Major General Webb late of the Army Medical Staff, were interred in the Dean Cemetery, Edinburgh Surgeon Major General Webb died in Cairo on March 18th and the body had been embalmed and brought to Edinburgh Deceased resided in Edinburgh twelve years ago when he filled the office of deputy surgeon general for Scotland Among those attending the interment were Surgeon General Sir A. Christison, Bart, Surgeon Major-General Turnbull, Surgeon Colonel Moir, Surgeon Colonel Arnott, and Major Mitchell, R A M C

The Will of the late Sir John Struthers

The will of the late Sir John Struthers, Emeritus Professor of Anatomy in the University of Aberdeen, has now been made public The trustees are his wife, Lady Struthers Dr Alexander Bruce, Edinburgh, and Mr G Villiers Mann, S S C, Leith By a codicil dated Feb 20th 1899 the following bequests were made 1 To the Royal College of Surgeons, Edinburgh, the sum of £500, "for the purpose of promoting anatomical science" by the foundation of a lecture to be delivered every third year before the College The lecture might be on any part of normal anatomy, naked eye or microscopic, or on any subject in comparative anatomy within the vertebrata It might consist of original work not already published or of an account of the progress of anatomical science within a period, or of the history of anatomy in some particular place The lecturer must be chosen by the President's Council at least a year before the lecture was to be delivered He might belong to any country or profession, but must have done original work in the above-named branches of anatomy The money was to be invested as a special fund and the interest to be given to the lecturer as an honorarium The lecturer should be bound to publish the lecture or a full abstract of it in some British periodical 2 To the University of Edinburgh his stock of anatomical drawings except such as his son might wish to retain Many of them were by his own hand, in the making of which he had had much pleasure over many years 3 To the Edinburgh Royal Infirmary the sum of £100 as a slight recognition of the benefit he had derived from his connexion with the old Royal Infirmary where between 1842 and 1863 he had been a dresser, non resident surgical clerk, house physician, house surgeon, assistant surgeon, and junior ordinary surgeon, and in recognition of the pleasure he had had since returning to Edinburgh in sitting on the board of management of the Royal Infirmary 4 To the University of Glasgow the sum of £500 for the purpose of founding an award in anatomy to encourage original research or special practical work The prize was to be awarded for the best original work or for the best special dissection or preparation relating to any part of human or comparative anatomy the decision to rest with the Professor of Anatomy The award was to be made every second year and the Professor of Anatomy was to have it in his power to withhold the award in any year in which the work given in was not in his opinion such as to merit the award The award was to take the form of a gold medal with a money prize The award was to be open to all students or graduates of the University of Glasgow who were attending or had at any time attended the practical anatomy class of the University of Glasgow Any dissections or preparations for which the award had been made were to belong to the anatomical museum of the University labeled with the name of the person by whom they had been made The award was to be also open to women students of Queen Margaret's College

Edinburgh Royal Infirmary

At a meeting of the managers of the Edinburgh Royal Infirmary held on April 24th the superintendent presented his half yearly report In this report he stated that the operating theatre for the junior surgeon had now been completed and was a commodious, well lighted, and well heated theatre, thoroughly equipped and up-to-date, with subsidiary rooms attached The erection of the new pavilion was progressing steadily Several faulty points in connexion with the drainage of the pathological department had been put right The experiment had been tried of providing a home of rest for nurses who were not actually ill but were in need of rest and change of air For this purpose they had taken a house for a few months at North Berwick The experiment had proved so successful that they had resolved to establish a permanent home at a shorter distance from Edinburgh There was a decrease of £40 in the cost of

electric lighting and £17 of this decrease was due to its having been more carefully used.

Edinburgh Parish Council

At a meeting of the Edinburgh Parish Council held on April 24th it was resolved by a majority of one vote that a deputation of the council should wait on the General Lunacy Board of Scotland to urge the claims of the parish council to have all the members of the parish council formed as the Edinburgh District Lunacy Board, as had been done in the case of other large towns in Scotland.

April 25th.

IRELAND

(FROM OUR OWN CORRESPONDENTS.)

The Trained Nurses Question

THE county infirmary authorities object to the new rule laid down by the Local Government Board that a trained nurse means a person who has resided for not less than two years in a clinical or other hospital recognised by the Local Government Board and who after an examination has obtained from such hospital a certificate of proficiency in nursing. They will not accept the certificate of the authorities or staff of any hospital except a clinical hospital recognised by the examining bodies in Ireland, England, or Scotland unless the non-clinical hospital has at least 150 beds and unless due provision is made for giving the probationer nurse a course of training in the nursing of cases of infectious diseases. It is against this hard and fast rule which practically restricts the training of nurses recognised by the Local Government Board to three or four institutions in Ireland, that many of the county infirmaries have protested. The governors of the Londonderry Infirmary and those of the Downpatrick Infirmary Board asked that the officials of the Local Government Board should inspect their arrangements with a view to their being recognised but the authorities of the former at their meeting on April 19th were informed that they declined to rescind their rule. They will recognise a nurse trained elsewhere as eligible for appointment as nurse in a Poor law union hospital, but the Local Government Board will not recognise her as a trained nurse within the meaning of the Local Government Act—that is, a nurse the half of whose salary would be recouped by the Local Government Board.

The Prevention and Treatment of Tuberculosis

Those members of the medical profession in Belfast who had grave doubts about the propriety of lecturing a mixed audience (lay and medical) on such a purely medical subject as "The Prevention and Treatment of Tuberculosis," feel that what has subsequently occurred has more than justified their fears. Ever since Sir William Broadbent's visit the lay press is being filled with letters, some indeed of a most absurd nature, on the treatment of consumption. Mr James Arthur Gibson who has gained some notoriety by writing articles on the Nordrach treatment in the *Nineteenth Century* where, it seems, 95 per cent of all cases of consumption without any selection are, according to the local press, cured, has a letter in the Belfast papers which must be interesting reading to those who took part in the recent meeting there. He says that a sanatorium to be successful must be run on sound lines and be put in charge of a thoroughly competent, specially trained (I suppose only at Nordrach?) medical man. "Even Sir William Broadbent himself would not be fitted to take charge of a sanatorium until he had obtained that practical knowledge of the treatment which is so necessary." "One of the best known men in the medical world of Scotland now disclaims the new treatment because he failed to get results at a consumption hospital with which he was at one time connected and at which they carried out a half hearted 'open air' system. He says that the great majority of the patients died and naturally so, to begin with, the doctor did not know his work practically, and in the next place he left the patients to their own devices while he himself went to look after his private practice. No results worthy the name could be got under such circumstances. It is very sad to find that one of the best known men in the medical world of Scotland," just as one of the most distinguished of his English *confrères* (Sir William Broadbent) is deficient, according to Mr Gibson in the practical knowledge of his work. Having such a thorough contempt for Scotch and English medical opinion on the treatment of consumption it is very hard to find that Mr Gibson has no better opinion of the medical men of his own country. He says of the Consumption Hospital in Belfast—"It is the same with your Forster Green Hospital, where you have a hospital run by two or three doctors, who are in private practice and who each perhaps has his own idea of treatment and sees his patients but once a week, you cannot expect to get results, it would be unfair to ask for results of a permanent character. At the Forster Green Hospital I could see little that was right except the house and the grounds. These are all that could be desired, and what remains to make it as good a sanatorium as need be is but to have a practically trained doctor at the head of the establishment to regulate all its affairs and to give his line solely to that work. If such were the case cured consumptives from the Forster Green Hospital would soon be dropping in on their astonished friends." Such writing is little short of impertinence. Does Mr Gibson imagine that medical men in Belfast who have visited continental sanatoria (not one, but many), and who have sent patients there and who are carrying out the treatment in Belfast, are not able to observe and draw conclusions for themselves? Some of them of the greatest experience—seeing that the results even at these continental sanatoria are unfortunately by no means so brilliant as Mr Gibson states, for they, alas, know the after histories of their patients—feel that the time has not yet come to pronounce a decisive opinion on the value of sanatoria treatment. There can be no question that fresh air, sunlight, and nourishing food are of the utmost value in the treatment of consumption, combined with regular habits as to food, sleep &c. The question of exercise is a debateable one. But to tell us that the type of treatment as carried out at one particular sanatorium is the only one is pure quackery, and to lead unfortunate consumptives to imagine that 95 out of every 100 of them can be cured by going to that or to any other sanatorium is contrary to all medical experience. There is undoubtedly a good deal in the open air treatment of consumption, but the way it is being at present "boomed" by people with ready pens but with no medical training is calculated to make men who are accustomed to look at things from a scientific standpoint rather critical. The question is still *sub judice* and dogmatism at present is foolish and convinces no one. We must wait for further experience.

Medical Libel Case

On April 20th and 21st, at the Four Courts, Dublin before the Lord Chief Baron and a special jury, the libel action of Thompson *v.* Falls was tried. The plaintiff was Dr Thompson, surgeon to the Tyrone County Infirmary, while the defendant was a solicitor practising in Enniskillen, county Fermanagh. The action was brought to recover damages laid at £2000 for alleged libel. Dr Thompson was examined in July 1896, as a medical witness on behalf of prisoners in the case of the Queen *v.* James and Thomas Maguire who were charged with the murder of a man named Funston. The trial took place in Omagh, the jury disagreed, and the prisoners were again tried at the Ulster winter assizes in Belfast, when the plaintiff was examined as a witness for the prisoners and they were acquitted. The plaintiff (Dr Thompson) subsequently was a Parliamentary candidate for North Fermanagh when he alleged that on or about Oct. 24th, 1898, at Derrygonnelly, the defendant spoke and published about him the following: "What was he (plaintiff) doing? He went to the Unionists and he said 'Oh I am a Unionist, you will support me as against the Nationalists' and he attempted to get their votes in that way. Then he went to the Nationalists and although he did not say it in so many words these were the grounds on which he came forward. He (meaning plaintiff) said—'What part did I take in the Maguire trials? Did I not do so and so?' He did not say this in so many words but did he not make political capital out of it. He (Mr Falls) would be the last man to get up and say a word against any professional man getting up in a court of justice and giving his evidence fairly and justly but when a man turned himself from a professional witness into an advocate and had to be reproved by the Attorney-General and the Lord Chief Justice (himself a Roman Catholic) for his gross brutality then he saw he was not doing what was right." The plaintiff also complained that the defendant on Nov. 29th spoke and published of him other words among them—

"I have an opportunity now of eating my words and for apologising for the gross slanders I am said to have spoken," and he went on to say that he would do nothing of the kind, "but, on the contrary, I am prepared to repeat on this platform everything I said, and, what is more, I prove what I said is true" It was averred that the words complained of meant that the plaintiff was guilty of grave professional misconduct and that, actuated by unworthy motives, he gave wilfully false evidence calculated to defeat the ends of justice The defendant denied that the words complained of were spoken of the plaintiff in relation to his profession and he also denied that he caused them to be published in newspapers There was also a plea of no libel and a statement that the words were spoken of the plaintiff as a Parliamentary candidate on a matter of public interest without malice and in the belief that they were true The defendant was conducting agent for plaintiff's opponent in the Parliamentary election contest The jury, after a trial lasting two days, found that the Derrygonnelly speech was not a fair comment and assessed £25 damages for it They considered the other speech a libel and that it imputed gross professional misconduct, damage being fixed at £25 in this instance also Dr Thompson has thus had a complete victory on all the points of the case

Meath Hospital and Co Dublin Infirmary

At the annual prize examinations in this institution [illegible]nior prizes in Clinical Medicine and Surgery were awarded [illegible] Mr Edmund Bennett (gold medal) and Mr Patrick S O'Reilly (silver medal) The junior prize went to Mr Byrne

The Death of Mr William Carte, F R C S Irel

Mr William Carte, Surgeon to the Royal Hospital, Kilmainham, died on Monday last, April 24th, at the hospital, [illegible] the great regret of a large circle of friends and fellow [illegible]ons Mr Carte had occupied his official position for [illegible]er 40 years and enjoyed a well earned reputation among his [illegible]edical colleagues He was formerly curator of the Museum of the Royal College of Surgeons in Ireland and was a vice president of that corporation He was well known in Dublin as a man of sound business capacity and advanced ideas—qualities which he showed in his intimate connexion with some of the largest municipal matters of the city He had also been assistant surgeon to the 4th Light Dragoons, a member of the Crimean Pathological Board, and was the author of "Climate and Zoology of the Crimea during the campaign, 1854–1856"

April 26th.

PARIS

(FROM OUR OWN CORRESPONDENT)

The Treatment of Congenital Torticollis

AT the meeting of the Academy of Medicine held on April 11th M Berger showed a child, aged 10 years, the subject of congenital torticollis, scoliosis and cranial and facial asymmetry A successful result had been obtained by dividing subcutaneously both the sternal and clavicular attachments of the sterno mastoid muscle together with massage The child was born by a breech presentation and a few days after birth a tumour was noticed on the right side of the neck which, however, disappeared little by little although the head remained in a vicious position owing to right torticollis When M Berger first examined the child he presented besides the torticollis the following deformities a diminution in both the vertical and transverse diameters of the face on the right side, an obliquely oval conformation of the skull, a cervical spinal curvature with the convexity towards the left, a dorsal curvature with the convexity towards the right, and a compensatory lumbar curvature with convexity towards the left M Berger being a firm believer in the subcutaneous method of section of the sterno-mastoid performed this operation, straightened the head, and kept it in the corrected position for a month by means of a plaster bandage Afterwards he prescribed exercises which consisted in bending the head latera[illegible] until the ear touched the shoulder and i[illegible] as possible in the opposite direction to [illegible] the deformity had existed The spin[illegible] treated by repeated pressure, the patie[illegible] Sayre's apparatus These exercises w[illegible] every day, then every other day, and [illegible] The position of the child's head is now quite correct and all movements are easily performed The spinal curvatures no longer exist and the facial deformity is greatly lessened

The Assistance Publique

In the month of December, 1896, the Municipal Council asked the prefectoral administration to prepare an estimate showing the minimum sum necessary for the thorough carrying on of the various departments of the Assistance Publique M de Selves has accordingly drawn up a report which will be discussed by the Municipal Council in the course of this session The Prefect of the Seine divides his report into three headings (1) new works undertaken, (2) repairs and improvements, (3) renewal of linen, &c The total amounts to over 72,000,000 fr and is distributed as follows 1 New buildings—hospitals for adults hospitals with 500 beds on the right bank, 7,700 000 fr, rebuilding the hospital of La Pitie, 500 beds, 5 500,000 fr, rebuilding and enlarging the Aubervilliers hospital, 6 600,000 fr, re building and enlarging the Broussais hospital, 5,500,000 fr, a special hospital on the left bank for skin diseases and syphilis of 1000 beds, 11,000,000 fr, rebuilding the Broca Hospital, 1,650,000 fr, total, 37,950,000 fr 2 Children's hospitals for general diseases rebuilding and improving a hospital of 376 beds, 3,760,000 fr, erection outside Paris of a hospital of 200 beds for children suffering from tuberculous bone disease, 1,060,000 fr, total, 4,820,000 fr 3 Infirmaries Brevannes, improvement and construction [illegible] a building for 1400 beds, 4,660 000 fr, La Roche fo[illegible]cauld, enlargement, 1,000,000 fr, total, 5,660 000 fr 4 G[illegible]eneral prophylaxis against tuberculosis, 4,300,000 fr 5 G[illegible]eneral expenses, construction of a central laundry, 2,000,0[illegible]00 fr, of a central linen store, 500,000 fr, total, 2 [illegible],000,000 fr Repairs and improvements adults hospitals, 6,[illegible],000 fr, children's hospitals, 837,000 fr, infirmaries, 799,[illegible]000 fr, reserves for unforeseen expenses, sundry expenses, 18[illegible]000 fr, maisons de retraite, 562,000 fr, of linen, 1,500,000 fr, [illegible],000 fr, total, 8,918 000 fr Renewals 6,414,000 fr, total 7 914 0[illegible] fr Grand total, 72,062 000 fr The adoption of this budget w[illegible] allow of the establishment of 2810 new beds, of which 1600 w[illegible] could be in infirmaries and 1210 in hospitals This would be a [illegible] great advantage to the sick, for at present many beds i[illegible]en the hospitals are occupied by chronic cases owing to wa[illegible]nt of room in the infirmaries, so that this new scheme [illegible] would set free a number of beds for acute cases If the [illegible] Municipal Council adopts this programme as probably it wi[illegible]l, the Prefect of the Seine will ask for powers to issue b[illegible]onds to produce the sum of 75,000 000 fr The expenses and [illegible]d repaymen of the loan will be provided for by a special rate [illegible]d

New Drugs and their Use in Hospitals

The Assistance Publique has just published a [illegible] list of drugs which hospital physicians are authorised to [illegible] prescribe for their hospital patients Some of these can on[illegible]ly be ordered under certain restrictions—that is to say, [illegible] they can be ordered once after giving notice to the chief me[illegible]dical officer, but if it is wished to repeat the prescription thi[illegible] can only be done through the Drug Committee on the applic[illegible]ation of the principal medical officer Among such drugs are [illegible] bromoform di iodoform, orthoform, iodol, jambul, phloroglu[illegible]cine, piperazine, protargol rubine and salophen Some [illegible] drugs are absolutely forbidden, such as eucaine, acetate o[illegible]f thallium, Koch's tuberculin, and ovarine It is somewhat c[illegible]urious that essence of fennel is forbidden while essence of c[illegible] innamon is allowed

Nerve Stretching in the Treatment of Varicose [illegible]cers

At the meeting of the Society of Biology [illegible] held on April 15th M Chipault encouraged by the success [illegible] he had met with in treating perforating ulcer by nerve stre[illegible]tching suggested to the society a new method of treating v[illegible]aricose ulcers by the same process The treatment consists of t[illegible]hat two procedures (1) Nerve stretching Owing to the position in [illegible] which a varicose ulcer most commonly occurs the nerve ge[illegible]nerally involved is the musculo cutaneous and sometimes a[illegible] also the internal saphenous In stretching the nerve great car[illegible] must be taken not to break it, for in a varicose subject the [illegible] of the legs are particularly friable (2) The direct treatm[illegible] [illegible] ulcer This is effected in two ways In large [illegible] surrounding skin is in an unhealthy condition [illegible] scraped so as to transform a fœtid wound int[illegible] healt[illegible] When the ulcer is small it [illegible] ges are dissected away a[illegible] down to the fascia [illegible] ed by silk [illegible]

The elasticity of the skin of the leg is considerable, but time must be given and the sutures tightened gradually If this be done it will be found that the surgeon can close a wound which at first sight seemed far too large for such a result Ulcers treated in this way often heal by first intention

April 25th.

SWITZERLAND

(FROM OUR OWN CORRESPONDENT)

Cancer of the Œsophagus

DR. F DE QUERVAIN, surgeon to the Chaux de Fonds Hospital, has in a case of deep œsophageal cancer achieved a success which, though only palliative, seems worthy of record The cancer began at the level of the cricoid cartilage and extended almost to the arch of the aorta Dr de Quervain performed gastrostomy to enable the patient to be properly nourished after the removal of the tumour 10 days later he removed the whole of the tumour together with part of the thyroid gland and the left recurrent nerve already involved, drawing up the distal end of the œsophagus as far as possible and severing unhealthy tissue. The wound was stuffed with gauze and healed without reaction A pharyngeal fistula remains through which saliva is discharged, this is absorbed by some pads changed three times a day The patient, who was admitted to the hospital on Jan 9th and was dismissed on Feb 11th, has taken up his work again as a farmer, and was seen on March 11th in good health and was rapidly gaining weight Dr de Quervain is a young surgeon of the Bernese school of Kocher

Antitoxin Treatment of Tetanus

Dr E Tavel of the Bacteriological Institute of Berne reports on 12 cases of tetanus treated with his antitoxin. In the first two successful cases (in 1894) the serum of a dog was used in a strength of from 1,000 000 to 2 000,000 The dog succumbing to some intercurrent illness Dr Tavel did not succeed till 1897 in obtaining efficacious serum and then from a horse in a strength of from 1,000 000 000 to 2 000 000 000 This serum has kept well and remained efficacious for a year at a time. It has been used in 10 cases by different medical men, the doses varying from one to 16 the cures taking place slowly after some weeks—gradually but surely, in some cases quite remarkably so Seven of these cases recovered, one of the fatal cases being desperate at the time injections were commenced This contrasts well with another report of 11 fatal cases out of 13 where antitoxin was not resorted to The last three cases of Professor Girard and Professor Kocher were interesting on account of the mode of application, the serum being injected into the lateral ventricle of the brain after trephining and in doses of five grammes on several occasions intravenous injections of from 20 to 50 grammes being also used. Two of these patients recovered. Professor Roux of Lausanne, whose results with intra cerebral injections of antitoxin are about to be published, considers the prognosis to be absolutely favourable if the operation is performed quite at the onset of the symptoms.

Zürich, April 24th.

ROME

(FROM OUR OWN CORRESPONDENT)

The Congress against Pellagra

OF the 'Seven Plagues of Italy" there is none more pernicious than pellagra or 'elephantiasis Italica" a constitutional or blood distemper operating destructively on the integument What are its causes? If we go deep enough we find them in 'miseria' and ignorance to begin with secondarily, in malnutrition particularly in that perverted form of alimentation which confines itself to maize and maize alone, oftener than not diseased itself, thirdly and lastly in dirt or neglect of personal cleanliness and of elementary hygienic laws That the consumption of maize and that of an impure kind, to the exclusion of other diet is a main factor in producing pellagra is proved by the circumstance that in the Lombardo-Venetian territory where this is the chief food of the agricultural labourer the disease is mostly to be found, while in Calabria and Sicily where maize is practically unknown no such disease exists Nay, further, in the Alta Valtellina, much nearer Lombardo-Venetia, pellagra numbers no victims because there there is neither cultivation nor consumption of maize, but in the Valtellina Bassa where there are both the disease is painfully in evidence About 17 years ago an enlightened and vigorous effort was made in Milan to come to close quarters with pellagra—its cause, its cure and its prevention—and a committee of 38 members, chiefly medical, went thoroughly into the problem Eight years' study on the part of these gentlemen culminated in at least one practical step—the institution of the 'Pellagrosario," or home for children inheriting the pellagrose cachexia or in the first stage of the disease, and, thanks to royal and local munificence, in 1890 the first "pellagrosario" was erected on a site at Inzago, some 15 miles from Milan Previously to this the means of encountering the malady were the "locande sanitarie," or sanitary dispensaries, with 'forni co-operativi (coöperative bakeries) and cheap kitchens where food of a varied, sound, and sustaining kind was doled out to the sufferers This, however, did little more than alleviate the symptoms of a malady already established, while chronic cases of an aggravated type were sent to hospital and the worst cases of all, those afflicted with pellagromania, were accommodated in asylums as on the whole the preferable course to letting them commit suicide by *sus per coll* on the handiest tree or by taking a header into the nearest pool The committee wisely concentrated its remedial efforts on the rising generation which had still a chance of rescue from the depraved conditions of their nutrition with the inevitable sequelæ of mental hebetude melancholic tendency, and general apathy towards the cleanly virtues 'Remove these incipient victims,' practically said the committee, "from their deteriorating surroundings, wash, feed and clothe them well, educate them so as to rouse their minds and to make them the intelligent custodians of their own health, so that on their return to their families they may have an enlightening and salutary influence on their brothers and sisters or even parents, and so induce the atmosphere in which neglect of sanitary law does not thrive" All this the "Pellagrosario d'Inzago" endeavours to achieve, and with what results? Of the Milanese communes 96 sent "pellagrosi" between 12 and 22 years of age to Inzago—277 males and 275 females After treatment extending over a series of months 238 of the former and 250 of the latter have returned home cured, others, including 80 sent during the last statistical year, are still under observation In that year 40 girls were admitted in the months of October, November, and December and 40 boys during January February, and March The former besides reading and writing, were instructed in special knowledge necessary for the agricultural labourer, the latter, in addition to the above, were taught some of the main principles of husbandry, and both girls as well as boys were exercised in suitable manual work, indoors and outdoors 60 per cent came in analfabeti" (unlettered) Not one went out unable to write his or her name Much of this gratifying result is attributed to the skill the energy, and the perseverance of the director of the Istituto d Inzago, Dr Giuseppe Friz and the three excellent Suore (sisters) of the Adoratrici della Rivolta d Adda who carry out his instructions Meanwhile, the example afforded by the Institute cannot but fructify ere long in the multiplication of others in the pellagrose districts Sanguine anticipation in this direction was afforded at the Congresso contro la Pellagra recently held at Padua A paper read by Dr Igino Sormani of Milan on 'Pellagrosario o Locande Sanitarie?' once more put in evidence the superiority of the Inzago Institute to the preceding practice but dwelt with much cogency on the fact that not till the peasantry are educated out of their superstitious reverence for tradition and their misgivings as to hygienic innovation will even Inzago have its fair chance or its normal effect Others of the congressisti (Dr Ceresoli of Brescia, Professor Rezzara of Bergamo, and Dr Brunati of Como) made valuable contributions to the better understanding of the causes of the disease and to the more effective devising of remedial legislation while Professor Zambroni of Ferrara raised a most profitable discussion on the treatment of 'pellagrosi in infancy The transactions of the Congress, of which the official publication is announced will be found to have advanced the solution of the problem in not a few directions, but the grand difficulty in all Italian reforms—the economic question—still throws its sombre shadow over

this and similar undertakings It is much, however to have the terms of the problem clearly defined and the limits of remedial legislation brought home to the collective mind of Italy, and for this indispensable preliminary we have to thank the representative citizens of the Lombard capital—chiefly its medical consultants and its general practitioners

April 23rd

Medical News.

SOCIETY OF APOTHECARIES OF LONDON—In April the following candidates passed in the subjects indicated —

Surgery—C J Barnes, King's College Hospital W F C Bennet (Section I) Sheffield H E. Dalby Charing-cross Hospital A. G C Davies (Section II) Guy's Hospital T S Elliot (Section I), London Hospital H L. Hands Madras and Charing-cross Hospital H. C Holden Guy's Hospital J J Huey, Glasgow, W S Inman (Sections I and II) Sheffield J W Robertson, Kingston, Ontario W Sisam (Section I) Birmingham, S. Sugden Manchester and St. Mary's Hospital L. L G Thorpe University College Hospital and W H Willcox, St. Mary's Hospital

Medicine.—J M Anderson, Aberdeen and Middlesex Hospital F W Chesnaye (Section II) St George's Hospital J T Davies (Sections I and II) and H S L Davies (Section II), Michigan W J Evans and H Greenwood, London Hospital W Hickey (Section I.) Manchester W St G G Hill St Mary's Hospital G C Hobbs (Section I) St. Bartholomew's Hospital W S Inman (Sections I and II) Sheffield L. Liebster, Vienna and London Hospital W P R Newth St. Thomas's Hospital H I Pickering (Section I) St. Bartholomew's Hospital A. H Safford King's College Hospital W Sisam (Section I) Birmingham L. K Tickner Durham and J M. Twentyman, Cambridge and King's College Hospital

Forensic Medicine—J M Anderson, Aberdeen and Middlesex Hospital C F W Dunn Cambridge and Middlesex Hospital W J Evans London Hospital T R. Griffiths University College Hospital, W Hickey Manchester W St G G Hill St Mary's Hospital G C Hobbs, St. Bartholomew's Hospital W S Inman Sheffield E. P Marett, St Thomas's Hospital G S Moore London Hospital H J Pickering, St. Bartholomew's Hospital J W Robertson Kingston Ontario A. H Safford, King's College Hospital W Sisam Birmingham J Thompson, Belfast J M Twentyman, Cambridge and King's College Hospital and E. D Wortley, St Bartholomew's Hospital

Midwifery—G Aldridge London Hospital C J Coleman, Cambridge and Birmingham A. B. Dunne Cambridge and Leeds E L. Gowlland St. Mary's Hospital H. M Hardy Guy's Hospital J R. Howroyd Leeds W S Inman, Sheffield C L. Lemin London Hospital B. S O Mansell St. Bartholomew's Hospital W E. Maw and T C Mitchell Leeds G S Moore London Hospital S. Page Birmingham and A. C. S Waters, St Bartholomew's Hospital

The diploma of the Society was granted to the following candidates entitling them to practise medicine surgery and midwifery:—C J Barnes C J Coleman H E Dalby, A. G C Davies H L. Hands J J Huey W S Inman, L. Liebster, E. P Marett A. H. Safford, and S Sugden.

UNIVERSITY OF DURHAM — At the Second Examination for the degree of Bachelor in Medicine held at the College of Medicine, Newcastle upon Tyne, in April, 1899, the following candidates satisfied the examiners —

Anatomy Physiology and Materia Medica—Second-class Honours: Vincent Blumhardt Nesfield St. Mary's Hospital and William Greenwell Robson, College of Medicine Newcastle-upon Tyne. Pass List Anthony Bourchier Bradford St. Thomas's Hospital Mary Evelyn de Rusett, College of Medicine, Newcastle-upon Tyne Alice Maud Dodd and Mary Jane D Vaz, London School of Medicine for Women Letitia Nora Ede College of Medicine Newcastle-upon Tyne Henry Wallace Furnivall, University College London James Alfred Giles, College of Medicine, Newcastle-upon Tyne Cheila Mary Hankin and Katharine Mary Helen Hawkins London School of Medicine for Women William Curling Hayward M.R.C S L.R.C P Charing cross Hospital Guy Hannah Kirby Mason College, Birmingham Hugh Robert Kendal, Konred Manson Leonard Montgomery Markham, Leonard Clark Newton Ernest Edward Norman, Hermann Heinrich Ruffmann and David Rees Roberts College of Medicine, Newcastle upon Tyne Carl Anders Ryman, St. George's Hospital and Hugh Widdas, Frederick George Wilson, and Thomas Wilson, College of Medicine, Newcastle-upon Tyne

UNIVERSITY OF CAMBRIDGE — In April the following candidates satisfied the examiners in both parts of the examination for the Diploma of Public Health —

Thomas William Naylor Barlow Hugh Howie Borland Stanley Copley Arthur Edward Druitt, William Francis Grant, John Charles White Halliday Elias Francis Harwood George Frederick McCleary John Middleton Martin, Ernest William Gurney Masterman, Patrick Murison Arthur Augustus Mussen James Thomas Charles Nash Edward Llewelyn Parry Edwards, Benjamin Lewis Paton Arthur Maxwell Nicholson Pringle Harry James Spon, Claud Martin Vernon and Ethel Mary Nucella Williams.

DIPHTHERIA AT ABERDARE—At the meeting of Aberdare Urban District Council held on April 21st Dr Davies stated that since Jan 1st there had been [illegible] the diphtheria notified to him

NEW SEAMEN'S HOSPITAL FOR CARDIFF—A special meeting of the Cardiff Seamen's Hospital committee was held on April 18th, when it was stated that a balance of £4250 remained to be collected before July 26th next

ROYAL ALBERT HOSPITAL, DEVONPORT—A successful bazaar in aid of the funds of the Royal Albert Hospital was recently opened at the institution by Lady St Levan The Prince and Princess of Wales, as patron and patroness of the hospital, sent some choice flowers from Sandringham The proceeds of the first day amounted to £200

SUCCESSFUL VACCINATION—Mr F N Williams, public vaccinator of Brentford, has been awarded by the Local Government Board the sum of £13 11s for successful vaccination in his district —Awards have also been granted by the Local Government Board for successful public vaccination to Dr James A B Thompson of the Fourth District of the Ongar Union and to Dr J R White of the Second District of the same union

LITERARY INTELLIGENCE—Messrs Cassell and Company, Limited, announce the early publication of a new text-book on Orthopædic Surgery by Mr Jackson Clarke. The work is to consist of about 300 demy octavo pages and will be fully illustrated Besides furnishing a text book on the subject it has been the author's aim to embody the many advances, including the Roentgen ray process, which have been recently made in the department of surgery with which it deals A special feature of the book is to be an exposition of the pathology of deformities as a basis of orthopædic surgery

ASSOCIATION OF REGISTERED MEDICAL WOMEN—The April meeting of this association was held on April 11th in the library of the association, New Hospital for Women, Mrs Stanley Boyd, M D, Brux, Vice-President of the association, being in the chair —Miss Traill Christie, M B, B S Lond, late officer on plague duty in India, read a paper on the Various Methods for the Prevention of the Spread of Plague which have been adopted from the time of the sixth century till now Miss Christie spoke specially about the methods and result of inoculation against plague, as she had been connected with that branch of the work —Miss Sharpe, L R C P & S Edin, showed a case of Lupus of the Nose and Throat treated by x rays The growth on the nose had disappeared after 24 applications and the throat had greatly improved after 12 —Miss Sharpe also read a paper on X ray Therapeutics and mentioned another case of lupus under her care which was still under treatment and making satisfactory progress

QUEEN'S COLLEGE, BELFAST—The following is the list of class prizes in the Faculty of Medicine at the close of the winter session, 1898-99 —Zoology Senior—James Herbert Moore Junior—Joseph Clarke M'Pherson, Ernest Marcus Henry Milligan, Thomas Lyle, David John Carlisle, and George Baird Moffett (equal) Chemistry Senior — Reginald Thornton Lloyd Junior — Ernest Marcus Henry Milligan and Thomas Lyle Practical Chemistry Senior—Robert James Bethune and John M'Clatchey Junior—Alexander Dick, Hugh John Forbes, and Thomas Dixon Liddle (equal) Chemical Laboratory Thomas Bernard Vinycomb Systematic Anatomy Senior—David M Mordie, B A Junior—Henry Mulrea Johnston, William Henry Norman Bright, and John M'Clatchey Practical Anatomy Third year — John Henry Gill and David M'Mordie, B A (equal), and Hugh Moreland M'Crea Second year—Walter Phillips and Robert Alexander Stewart (equal), and Sydney Herbert George Blakely First year—James William Herbert Babington, Thomas Killen, and William Henry Norman Bright Physiology and Histology Senior—David M Mordie, B A Samuel Robert Hunter, and Albert Lytle Black Junior—Henry Mulrea Johnston Practical Histology James Graham Campbell, John Stewart Ferguson Weir, and James Edwin Wilson Medicine William John Hogg and David Milliken Surgery Thomas Gray, Thomas Stratford Logan, and Robert Matthewson Materia Medica Samuel M'Clure and William John Brereton Fergus Midwifery, Gynæcology, and Diseases of Children: Marion Braidfoot Andrews and Hugh Barkley Steen (equal), Thomas Gray, and Joseph Stewart Ophthalmology and Otology John Campbell Rankin, John Elder MacIlwaine, and John Edmund Clements

X RAY WORK AT CHARING-CROSS HOSPITAL—At this institution Mr Mackenzie Davidson has undertaken to give a course of six demonstrations in practical Roentgen ray work from 10 A M to noon on Wednesdays, commencing on May 10th It is not easy to demonstrate x ray results to a large audience, so that the class will necessarily be limited, the maximum number decided upon being 24

ROYAL FREE HOSPITAL.—A meeting on behalf of the Buildings Improvement Fund of the Royal Free Hospital, Gray's Inn-road was held on April 25th at the Mansion House. The chair was occupied by the Lord Mayor who stated that the hospital authorities appealed for the sum of £8500 in order to enable them to carry out urgently required structural improvements in the wards and nursing quarters After an exposition of the hospital's pecuniary position his Lordship moved 'That this meeting appreciating the valuable aid rendered to the sick poor of London by the Royal Free Hospital pledges itself to use every endeavour to assist in obtaining the necessary funds to enable the Committee to carry out the structural improvements needed in the wards and nurses quarters and thereby render the institution more efficient for its beneficent work.' Sir Henry Burdett K.C B, seconded the resolution and testified to the admirable work done at the Royal Free Hospital Dr Harrington Sainsbury, Mr Albert G Sandeman, Mrs Garrett Anderson M D Paris, Mrs Scharlieb, M D Lond, Mr E Ford North (a former chairman of the weekly board) and Captain Jessel, M P, also urged the importance of raising the amount required Before the close of the meeting Mr Conrad W Thies the secretary, announced that the contributions so far received amounted to about £4200 A vote of thanks to the Lord Mayor brought the proceedings to a close

DIPHTHERIA IN LONDON—In the four weeks ended on March 25th the amount of diphtheria in London was substantially less than in the like period ended on Feb 25th, but the deaths were more numerous and the case mortality was consequently higher In the February period 957 cases were notified, as compared with 791 in the March period, the respective weekly averages being 239 and 198 In February all districts save one were invaded, in March all save two In February there were five districts in each of which upwards of 50 cases were notified, the aggregate being 365, while in March only four districts had each upwards of 50 notified cases, with 240 in all, other four districts having eight as a grand total. The deaths registered in the February period were 160 in number, or 37 weekly, and the case mortality yielded was 15 6 per cent, but in the March period the registered deaths rose to 166, or 46 per week, and the case mortality was 20 0 per cent In the several weeks of the March period the deaths registered were respectively 10 above, one below, five above, and three below the corrected decennial averages for the corresponding weeks of 1889–98 Had the total of the averages been recorded this year the aggregate number of deaths would have been 155 in place of the 166 which were recorded In the Outer Circle the total of 70 deaths in the February period gave place to 53 in the March period, the several weeks yielding 19, 14 nine and 16, or an average of 14 in March, and nine, six, two, and six, or 23 in all belonging to West Ham registration district, as against 38 in the preceding period.

PRESENTATIONS TO MEDICAL MEN—Mr John Roberts Thomson, M D, L R C.S Edin., F R.C P Lond of Bournemouth was recently the recipient of a testimonial. 12 months since he met with a serious bicycle accident which has until lately more or less incapacitated him from following with his usual activity many occupations outside his profession. He has been a resident in Bournemouth for a long period and is held in high esteem by the inhabitants The testimonial is a token of sympathy for on the anniversary of his accident on April 6th he received a parcel by post which contained bank-notes amounting to £1081 In the parcel was also a beautifully bound album bearing the monogram "J R T" The money is to be applied to the endowment of a ward bearing his name in the Royal Victoria Hospital an institution in which he has always taken a deep interest. It may be stated that the testimonial was subscribed for secretly and represents all classes of residents in the borough.—The members of the Bugle (Cornwall) Branch of the St John Ambulance Association have presented Mr Archibald Shaw, M D, C M Glasg, with a pair of carvers in a suitably inscribed case as a mark of appreciation for his services as honorary instructor of the class—Mr W M Sturrock, M B, C M Edin, who for the last 12 years has held the appointment of assistant medical officer at St Pancras Workhouse and Infirmary, was presented on April 21st by the officers of the establishment with a dressing case and a cheque as a mark of esteem and regard on his leaving the service of the St. Pancras Guardians He had also previously been the recipient of a dining-room clock, the gift of patients and other inmates, with all of whom he was very popular

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS

The Lunacy Bill.

WHEN the Lunacy Bill was considered in Committee by the House of Lords on April 20th their lordships struck out of the Bill Clause 21 which enacted that the visiting committee of every asylum should grant superannuation allowances to such of its officers and servants as were engaged in the care or treatment of lunatics, and that it should be the duty of the county council to confirm the allowances so made. The clause was objected to as an undue interference with count councils.

The Case of Mr Lamont.

On April 24th Sir CHARLES CAMERON called attention to the case of Mr Lamont whose arrest upon a charge of issuing false vaccination certificates and subsequent acquittal were commented upon recently in THE LANCET—The LORD ADVOCATE was unable to hold out hopes that the Treasury would pay any compensation to Mr Lamont.

HOUSE OF COMMONS.

THURSDAY APRIL 20TH.

The Treatment of Inebriate.

Sir M. WHITE RIDLEY in reply to Mr PICKERSGILL, stated that three inebriate reformatories had been certified. No local authority had yet established a reformatory but several were to his knowledge actively considering the question which he need scarcely point out, was not one which could be settled in a day He was confident that magistrates would not as a rule commit persons under the Act until they knew that provision existed for their reception into a reformatory No State inebriate reformatory had been established. All the institutions already certified were with one exception willing to receive persons committed under Section 1 of the Act.

The Legal Flash Point in India.

Lord GEORGE HAMILTON in answer to Sir EDWARD HILL, said that the Act with reference to petroleum passed by the Indian Government in February last was mainly a consolidation Act but with important amendments. The legal flash point was 76° close test, but a cargo of petroleum or petroleum held by dealers was allowed if the samples selected from such petroleum had their flashing points on an average at or above 73° and if not one of these samples had its flashing point below 70° A despatch from the Government of India, dated Simla, April 24th, 1895 stated that after a full inquiry the legal flash point was found to be satisfactory The despatch concluded as follows The reports which we have now received show that there have been a few lamp accidents but their occurrence does not appear to us to justify the raising of the present legal minimum flash point and we see no reason for modifying the opinion previously formed by us in regard to the matter"

Administration of the Vaccination Act.

Mr BROADHURST asked the President of the Local Government Board whether his attention had been called to the conviction at the Melbourn (Cambridgeshire) petty sessions, on the prosecution of the vaccination officer of the Royston Union, under Section 29 of the Vaccination Act, 1867 of William Bertram Parrish, the defendant having obtained a certificate of exemption under Section 2 of the Vaccination Act, 1898, but which he had failed to deliver to the vaccination officer within seven days of its being granted and whether he was advised that the mere failure to deliver such certificate to the vaccination officer within the prescribed period rendered it null and void and, if not, whether he would issue instructions to vaccination officers that where an exemption certificate had been granted and delivered although such delivery had not been made within the prescribed period, no proceedings should be instituted.—Mr T W RUSSELL, on behalf of Mr CHAPLIN replied: I have made inquiry as to the case referred to in the question and I find that the certificate of conscientious objection was not delivered to the vaccination officer until 11 days after it had been granted. I am advised that Section 2 of the Vaccination Act, 1898, only exempts the parent from liability to penalties under the Vaccination Acts if he delivers the certificate to the vaccination officer within seven days after it has been granted. I could no undertake to issue any general instructions to the vaccination officers not to take proceedings in cases in which certificates have been delivered after the time prescribed by the statute.

FRIDAY APRIL 21ST.

The Sewage Farm at Aldershot.

When the House was in Committee of Supply on the Army Estimates Mr JEFFREYS raised the question of the sewage farm at Aldershot and the propriety of supplying milk from the farm to the soldiers. The hon. Member said that the town of Aldershot would not have the milk

and he insisted that if it was not good enough for civilians it should not be given to the soldiers.—Dr FARQUHARSON suggested that an expert of the Local Government Board should be sent down to inquire into the state of things.—Mr POWELL WILLIAMS Financial Secretary to the War Office said that an inquiry would be made by experts and the War Office would be absolutely guided by the result but while he said that he also said that all that had been done had been in pursuance of the opinion of the Army Sanitary Committee which consisted of gentlemen perfectly qualified to speak with authority on the subject. That committee reported that the milk might properly be supplied to the troops, that the dairy was in perfect sanitary condition that the cows were clean and healthy and that there was an abundant supply of pure water

Medical Service in the Army

On the vote in Committee of Supply for medical establishments Mr POWELL WILLIAMS announced that there had recently been a great improvement in the number of candidates for the medical service They were now able to get two candidates for each vacancy and it was clear he said that the action taken by the Secretary of State with regard to this branch of the army was going to have the desired effect.—Colonel WELDY in the course of a speech of some length, dwelt on the advantages of the old system under which the medical officer was attached to a particular regiment.—Dr FARQUHARSON on the other hand claimed that the old system could not with advantage be re-established.—Captain NORTON and Mr PIRIE called attention to the insufficiency of nursing arrangements at Cairo and Alexandria after the battle of Omdurman —Mr POWELL WILLIAMS defended the department.—Sir WALTER FOSTER described the defence as inadequate and unsatisfactory and insisted that the condition of things both at Cairo and Alexandria would not be tolerated for a moment in a civil hospital

MONDAY, APRIL 24TH.

Imbecile Children.

Sir JOHN GORST, in answer to a question by Sir U KAY-SHUTTLEWORTH, said that the Government intended to bring in a Bill to deal with the recommendations respecting feeble-minded and defective children contained in the report of the Departmental Committee, but when the Bill would be introduced and in which House of Parliament were questions still under consideration

Notification of Infectious Diseases

The Bill to extend the Infectious Diseases (Notification) Act of 1889 to places which have not already adopted it passed through the Committee stage and was read a third time.

TUESDAY APRIL 25TH

Burials Bill

Sir MATTHEW WHITE RIDLEY stated in answer to a question that a Burials Bill was now practically ready and he hoped he might have an opportunity of introducing it during the present session In the present state of public business however he was obliged to refrain from giving any promise on the subject.

Bad Teeth among Army Recruits.

Mr POWELL WILLIAMS in answer to Colonel DALBIAC said that 1767 recruits were rejected in 1898 under the heading Loss or decay of many teeth

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FOOD AND DRUGS BILL.

PROCEEDINGS IN THE GRAND COMMITTEE

THURSDAY APRIL 20TH

The Standing Committee of the House of Commons met this day with Mr JOHN ELLIS in the chair and began the consideration of the Sale of Food and Drugs Bill introduced and promoted by the Government.

The first clause of the Bill deals with precautions against the importation of agricultural produce insufficiently marked, and upon this Mr STRACHEY moved an amendment the effect of which was to include among the articles to be conspicuously marked margarine coloured to imitate butter" He insisted that in many parts of this country and especially in the poorer districts of large towns, this coloured margarine was sold as genuine butter and he considered that people should have the protection offered by a conspicuous mark

Mr KEARLEY declined to support the amendment saying that if the colouring of margarine were prohibited all other forms of colouring would require to be prohibited Moreover he understood that the Government were prepared to accede to an amendment inflicting imprisonment in cases of repeated offence against the Act.

Sir CHARLES CAMERON said that he thought it unfortunate that this most important question had been raised on an amendment of very limited application. Both butter and milk were coloured and jam and sugar and many other articles of food and therefore if they were to deal with colouring they must do so in a much more comprehensive fashion. As for this amendment he might say that the grocers as represented by their Federation were against the prohibition of colouring.

Sir JOHN LENG suggested that in this matter of colouring people might be left to their own judgment and common sense.

Mr WALTER LONG President of the Board of Agriculture, who is the Minister in charge of the Bill said that the view of the Government was that a drastic proposal of this kind could not be justified and should not be enacted unless it could be shown that there was a large amount of fraudulent trading in the country which could not be put an end to without some such clause and unless it could be shown that the clause would strengthen the hands of the authorities without interfering unduly with a legitimate industry No attempt had been made to prove either of these conditions and therefore he submitted that the amendment was one which the Committee would do well to reject. It was true as had been stated that there was a very general feeling in favour of some more rigorous penalties and the Government were prepared to strengthen the Bill in that direction by the inclusion of imprisonment for repeated offences. After careful consideration he had come to the conclusion that if colouring were made impossible and if it were enacted that margarine was to be sold in its natural colour then for a very considerable period of time the sale of the article would be entirely destroyed.

After some further debate the amendment was rejected by 32 to 11 votes.

On the motion of Mr STRACHEY words were inserted in the clause making it apply to adulterated or impoverished cream."

Sir CHARLES CAMERON moved an amendment to introduce a sub-section to include within the operation of the clause any imported article of food adulterated within the meaning of the Sale of Food and Drugs Act. His object, he explained was to make the Bill applicable all round so that any article of food imported in an adulterated form should be examined by the Customs which he considered was the most effective way of dealing with adulteration

Mr KEARLEY supporting the amendment said that he did not see why this Bill should be confined to a few agricultural products when so many other products were imported in an adulterated form—such for instance, as lard adulterated with stearine and flour adulterated with ground rice.

Mr WALTER LONG said that if this amendment was carried it would largely extend the scope of the measure and among other effects it would increase very greatly the duties of the Customs. The clause already threw upon the Customs considerable duties and the Customs who were the best judges of what they could effectively do had advised him that such an addition to their duties as was proposed in this amendment would impose on them work which they could not efficiently discharge They must rather depend upon the other parts of the Bill which provided for greater activity in the localities As it stood the clause simply confirmed what the Board of Agriculture had been doing with regard to the main articles of food

Sir WILLIAM HOULDSWORTH suggested that the Government might extend the clause to the staple foods.

Mr WALTER LONG in reply to this suggestion did that he would be prepared to consider the case of lard and flour

Mr DAVITT thought that the right hon. gentleman might extend his consideration to bacon

Sir CHARLES CAMERON said that he could not accept the compromise offered His object was to have it made the business of the Customs to take samples and thus get at adulteration at the port of entry

Several other members having spoken the Committee divided when the amendment was rejected by 19 to 16 votes.

Captain DONELAN moved an amendment dealing with the branding of bacon and ham and the use of preservatives but he did not press it

Mr WALTER LONG said that with regard to the use of boric acid medical and scientific opinion was at present that it was not injurious to health. The President of the Local Government Board however had decided to appoint at once an expert committee to inquire into the whole question of preservatives, their use and how far such use was injurious to health

The Committee then adjourned

MONDAY, APRIL 24TH.

The Committee met again to-day, with Mr JOHN ELLIS in the chair and resumed the consideration of the Bill After some slight debate it was arranged that instead of going on with an amendment moved by Mr KEARLEY with regard to the minimum penalty for adulteration the whole question of penalties should be deferred until the Committee reached Clause 14 The Committee accordingly proceeded to the consideration of Sub-section 2 of Clause 1 which was amended so as to read as follows, viz.: The word importer shall include any person who shall, whether as owner consignor or consignee, agent or broker be in possession of or in any way entitled to the custody or control of the article, and prosecutions for offences under this section shall be under taken by the Commissioners of Customs and subject to the provisions of this Act. This section shall have effect as if it were part of the Customs Consolidation Act, 1876.'

Sir CHARLES CAMERON moved an amendment the effect of which was to give the Local Government Board as well as the Board of Agriculture power to ask the Commissioners of Customs to take samples. His object, he explained, was to stop the importation of articles of food which were diseased and would be injurious to health. He instanced the case of milk and said that it was most desirable that it should be analysed.

Mr WALTER LONG opposed the amendment, saying that the Local Government Board were convinced that it would not strengthen their hands in the detection and prevention of disease and that this section only dealt with articles with which the Board of Agriculture were specially fitted to deal

Sir WALTER FOSTER, on the other hand, supported the amendment He argued that an opportunity was offered here for increasing the usefulness of the Local Government Board in regard to the public health.

Mr T W RUSSELL, Parliamentary Secretary to the Local Government Board said that the Bill being confined to agricultural articles he did not think it would be wise to give this power to the Local Government Board.

On a division the amendment was rejected by 31 votes to 11.

Mr WALTER LONG then reminded the Committee of what had happened at the last sitting in regard to the proposal to extend the clause to all imported articles of food and his undertaking to consider the case of flour and lard He had given the matter his best consideration and he had decided to move during the report stage of the Bill the addition of the following words—viz.: 'Any other article of food to which this section may by Order in Council be declared applicable and which is so mixed adulterated, impoverished, or otherwise altered that the sale thereof by retail without notice of such adulteration would constitute an offence under the Sale of Food and Drugs Act, 1885, except in packages marked as prescribed by Order in Council."

Sir CHARLES CAMERON and other members of the Committee expressed satisfaction with this proposed change.

Mr ASCROFT moved an amendment giving the Commissioners of Customs power to detain goods while a prosecution was pending.

Mr WALTER LONG assured the hon. member that such a proposal was impracticable having regard to the perishable character of the articles.

After a short debate the amendment was withdrawn

Mr STRACHEY moved the omission of the words "provided that butter or milk shall not be deemed to be adulterated by reason only of the addition of any preservative or colouring matter which does not render the butter or milk injurious to health"

Mr WALTER LONG pointed out that the clause dealt only with imported articles and said that if preservatives were to be prohibited

the matter should be dealt with in a clause of general application. Further to accept this amendment would be to anticipate the inquiry of the experts.

Mr TOMLINSON suggested that the onus of proof that a preservative was no injurious to health should rest upon those who employed it in the preparation of the food.

The amendment after a long debate, was rejected by 29 votes to five.

Mr STRACHEY moved to add to the clause "Any butter milk, or cream containing any preservative shall be imported as preserved, stating the name of the preservative and the amount per gallon or per pound of such preservative."

This amendment was also rejected, the voting being nine members for and 28 against it

The Committee then passed to Clause 2, giving power to the Board of Agriculture to sample articles of agricultural produce sold in the country and in this connexion the Government agreed, after an expression of opinion by the Committee to extend the power to the Local Government Board.

The Committee thereafter adjourned.

BOOKS, ETC, RECEIVED

BAUERMEISTER, F Glasgow

Die Verletzungen des Auges. Von Dr E. Braun. 1899. Price 12s

Bericht über die 27 Versammlung der Ophthalmologischen Gesellschaft, Heidelberg 1898. Price 2s. 1899.

Die Diagnose des Farbensinnes. Von W A. Nagel. 1899 Price 1s. 3d.

Der Kolpeurynter seine Geschichte und Anwendung in der Geburtshülfe. Von Dr E. Biermer. 1899. Price 2s. 3d.

Handbuch der Gynäkologie Von J Veit. 1899. Price 16s

BLACK, A. AND C., Soho-square, London.

Milk Its Nature and Composition. By C. M. Aikman, M.A. D Sc. Second edition 1899 Price 3s 6d.

BLAKISTON'S, P., SON AND CO., Philadelphia.

Manual of Clinical Chemistry By E. H. Bartley B.S M.D Ph.G Illustrated. 1899.

CASSELL AND CO. London.

Hygiene and Public Health. By B. Arthur Whitelegge M.D B.Sc. Lond. D.P H. Camb. Illustrated. 1899. Price 7 6d.

CHEMIST AND DRUGGIST Offices, Cannon-street., London.

Practical Methods of Urine Analysis for Chemists and Druggists. By a Pharmacist. 1899. Price 1s. 6d.

DAVBARN AND WARD Farringdon-avenue, London.

The Natural Waters of Harrogate. By F W Smith, M.D Price 1s. net. 1899.

GLAISHER, H. J., Wigmore-street, London, W

Constipation and its Modern Treatment. By G Herschell M.D Lond. 1899 Price 2s. 6d. net.

HIRSCHWALD, AUGUST Berlin.

Die Physiologisch-Chemischen Grundlagen der Spermintheorie nebst Klinischem Material zur Therapeutischen Verwendung des Sperminum Poehl. Von Professor Dr Alexander Poehl, St. Petersburg. 1898.

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Ocular Therapeutics. By F W M. Ohlemann. M.D Translated and edited by Chas. A. Oliver A.M., M.D Univ Pa. 1899. Price 7s 6d. net.

A Practical Handbook on the Muscular Anomalies of the Eye. By H F Hansell, A.M., M.D and Wendell Reber M.D Illustrated. 1899. Price 6s net.

The Practice of Obstetrics. By American Authors. Edited by C Jewett. M.D Illustrated 1899. Price 20s. net.

A Practical Treatise on Fractures and Dislocations. By L. A. Stimson, B.A., M.D Illustrated. 1899. Price 25s net.

KING, P S. AND SON, Great Smith-street, Westminster

The Necessity for Criminal Appeal as Illustrated by the Maybrick Case and the Jurisprudence of Various Countries Edited by J H. Levy 1899. Price 10s. 6d. net.

LANE JOHN The Bodley Head, London and New York.

The Mandate. By T. Baron Russell. 1899. Price 6s.

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Geburtshülfliche Taschen-Phantome. Von Dr K. Shibata. Mit einer Vorrede von Dr F von Winckel. 4. Auflage. 1898.

Stereoskopisch - photographischer Atlas der Pathologischen Anatomie des Herzens und der grösseren Blutgefässe. Von Dr G Schmorl 1899.

LEWIS H K. Gower-street London.

The Exploration of the Urethra and Bladder By M. Tuchmann, M.R.C.S. M.D., Würzburg. Illustrated. 1899. Price 5s

LIBRAIRIE MALOINE, Paris.

Annuaire des Eaux Minérales. Par Dr G Morice. 1899.

LONGMANS, GREEN AND CO Paternoster-row London.

Inquiries concerning the Tactics of the Future. (Fourth edition, 1894 of the "Two Brigades.") By P Hoenig. With one sketch in the Text and three Sketch Maps. Translated by Captain H. M. Bower With two additional maps. 1899. Price 15s. net.

MACMILLAN AND CO. London.

A System of Medicine. Edited by T. C. Allbutt M.D., F R.C.P Vol. vi. 1899. Price 25s. net.

MURRAY JOHN Albemarle-street, London.

The Art of Dining By A. Haywood, Q C with annotations and additions by Charles Sayle. 1899. Price 5s.

OLIPHANT ANDERSON AND FERRIER, Edinburgh and London.

Among the Wild Ngoni. Being some Chapters in the History of the Livingstonia Mission in British Central Africa. By W A. Elmslie, M.B. C.M. F.R.G S., with an introduction by the Right Hon. Lord Overtoun. 1899.

PENTLAND, YOUNG J Edinburgh and London.

Outlines of Zoology By J Arthur Thomson, M.A. Third edition. Illustrated. 1899.

REDMAY PUBLISHING COMPANY Shaftesbury-avenue, London.

An American Text book of Diseases of the Eye Ear Nose, and Throat. Edited by G E. De Schweinitz, A.M., M D., and B. A. Randall, M.A., M.D Ph.D Illustrated. Vols. I. and II. 1899. Price 42s

SANITARY PUBLISHING COMPANY Fetter-lane, London.

Modern Drainage Inspection and Sanitary Surveys. By Girard J G Jenson C.E. Illustrated. 1899. Price 2s. 6d. net.

SCIENTIFIC PRESS, Southampton street, Strand London

Burdett's Official Nursing Directory 1899 a Directory of Nurses. By Sir H. Burdett K.C.B Price 5s.

STEINHEIL, G Paris.

Chirurgie de l Estomac. Par F Terrier et H. Hartmann. 1899.

UNWIN T F Paternoster-square, London.

The Oversea Library The Ipane By Cunninghame Graham. 1899. Price 2s

WHITTAKER AND CO., White Hart street, Paternoster-square, London.

Outlines of Physical Chemistry By A. Reychler Brussels. Translated by J McCrae Ph.D Heidl. Illustrated. 1899. Price 4s. 6d.

T J & J Smith's Professional Appointment Diary 1899. No. 43. (T J Smith, Son, and Downes, London) price 10s. 6d.—Executors and Administrators their Functions and Liabilities. How to Prove a Will. By G F Emery LL.M., Barrister-at Law (Effingham Wilson, Royal Exchange London. 1899) price 2s net.—Transactions of the American Pediatric Society tenth session. With an index of Vols. I. to x. Edited by F M. Crandall, M.D Vol. x. 1898. (Reprinted from the Archives of Pediatrics.) Magazines, &c., for May Strand Magazine, Boy's Own Paper Girl's Own Paper Leisure Hour Sunday at Home, Ludgate Magazine, Westminster Review Contemporary Review Friendly Greetings, Myra's Journal, Pall Mall Magazine, Windsor Magazine, Cornhill Magazine Blackwood's Magazine, English Illustrated Magazine, Knowledge, Humanitarian, St. Peter's Magazine The Englishwoman.

Appointments.

Successful applicants for Vacancies Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor not later than 9 o clock on the Thursday morning of each week, for publication in the next number

ADAMS, D V M., M.B., Ch.B. Edin., has been appointed Resident Surgeon to the Glasgow Royal Infirmary

ANDERSON J M.B., C M. Edin., has been appointed a District Medical Officer Tynemouth Union.

BATEMAN F J HARVEY B.A. Cantab. M.B., C.M. Edin., has been appointed House Surgeon to the Leith Hospital.

BAUMANN R P M.B., Ch.B. Edin., M.R.C.S. L.R.C.P Lond. has been appointed Resident Physician to the Glasgow Royal Infirmary

CAMERON A. F., M.B., C.M. Edin., has been appointed Resident Assistant Medical Officer for the Workhouse of the Sheffield Union.

CHRISTIE, B. R. CRAIG M.B., C.M. Edin., has been appointed Resident Physician to the Glasgow Royal Infirmary

FOSTER, J., M.B. Edin. has been appointed Clinical Assistant to the Chelsea Hospital for Women

GASS, R. B., M.B., C.M. Edin. has been appointed Medical Officer of Health by the New Heysham Urban Council.

GIBBONS, H. M.B., C.M. Aberd., has been re-appointed Medical Officer for the Desborough Urban District of the Kettering Union.

GRAHAM J W F L.S.A., has been appointed Medical Officer for the Piddington Sanitary District of the Bicester Union.

GRINSDALE, HAROLD B., M.B., B.C Cantab., F.R.C S. Eng., has been appointed Assistant Surgeon to the Royal Westminster Ophthalmic Hospital.

HECTOR, C. MUNRO, M.D Edin. has been appointed Demonstrator of Bacteriology University College, Sheffield.

HOLLINSHEAD F., M.D. St. And., M.R.C.S. has been appointed Medical Officer of Health for the King's Norton and Northfield Urban District.

JACKSON WILLIAM ROY M.A. St. And. M.B. C.M. has been re-appointed Medical Officer to the Second and Fifth Districts by the Southmolton (Devon) Board of Guardians.

JELLET W. B., M.B., Ch.B. Edin., has been appointed Resident Surgeon to the Glasgow Royal Infirmary

JORDAN, H. MARTYN F R.C.S., has been appointed Registrar to the Chelsea Hospital for Women.

LAWSON Dr has been appointed Medical Officer to the Coleford District by the Frome Board of Guardians.

MARSTON J A., C.B. M.D F R.C.S Eng., has been appointed Honorary Surgeon to the Queen, vice Deputy Inspector-General J Jee deceased.

MILLER, J M.B. C.M. Aberd. has been appointed a District Medical Officer Tynemouth Union.

MORE, J., L.R.C.P. Lond. M.R.C.S. has been appointed Medical Officer for the Rothwell Sanitary District of the Kettering Union.

NAISMITH, T. G., M.D. Edin. D.Sc. D.P.H. Camb. has been appointed Examiner in Public Health in the University of St. Andrews.

NIX, R. E. M.B., C.M. Camb., has been appointed Medical Officer for the St. James Sanitary District of the Bury St. Edmunds Incorporation.

NORMAN, R. P. M.D. B.Ch. Dubl., has been appointed Medical Officer for the Bradfield Sanitary District of the Hardingstone Union.

PARRY, L. A., M.D., B.S. Lond. F.R.C.S. Eng., has been appointed Honorary Anæsthetist to the North West London Hospital.

PARTRIDGE, THOS. M.R.C.P. Irel., M.R.C.S., has been re-appointed Medical Officer of Health for the Stroud Urban and Rural Districts.

SALMOND, J. L. M.B., C.M. Aberd. has been appointed Medical Officer to the Aberdeen Dispensary, Vaccine and Maternity Hospital, vice Hunter resigned.

SIMMONS, G. ALLBERY, M.D., B.S. Lond. M.R.C.S., L.R.C.P. has been appointed Attending Medical Officer to the Royal Pimlico Dispensary, London.

SYDENHAM, GEORGE FRANCIS, M.R.C.S., L.S.A. has been re-appointed Medical Officer to the Third District by the Southmolton (Devon) Board of Guardians.

THOMAS, A. W., L.R.C.P., L.R.C.S. Edin. has been re-appointed Medical Officer of Health by the Swaffham Urban District Council.

THOMAS, J. T., L.R.C.P. Irel., L.R.C.S. Edin., D.P.H. Irel. has been appointed Medical Officer of Health for Wiltshire.

WILSON, A. GARRICK, M.R.C.S. Eng., L.R.C.P. Lond. has been appointed Junior Out-patient Surgical Officer to the Royal London Ophthalmic Hospital, Moorfields.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index).

ADDENBROOKE'S HOSPITAL, Cambridge.—Resident House Surgeon. Salary £65 per annum with board, lodging and washing in the hospital.

ALTON UNION.—Resident Assistant Medical Officer at the Workhouse, Erdington near Birmingham. Salary £100 per annum, with furnished apartments, rations, washing, &c. subject to statutory deduction.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE, Gloucester.—Junior Assistant Medical Officer. Salary £100 per annum rising to £120 after the first year with board, &c.

BERKS COUNTY ASYLUM, Wallingford.—Junior Assistant Medical Officer unmarried. Salary to commence at £120 per annum rising £10 yearly to £140, with furnished apartments, board, attendance and washing. £8 per annum allowed in lieu of liquors.

BETHLEM HOSPITAL.—Two Resident House Physicians for six months. Apartments, complete board and washing provided and an honorarium at the rate of £12 12s. each per quarter will be paid. Applications to the Treasurer, Bridewell Hospital, New Bridge-street, E.C.

BURTON-ON-TRENT INFIRMARY.—House Surgeon. Salary £130 per annum, with a prospect of increase and rooms in the Infirmary free, also coals and gas.

CANCER HOSPITAL (FREE), Fulham road, S.W.—House Surgeon for six months. Salary at the rate of £50 per annum, with board and residence.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's-inn road, W.C.—Junior House Surgeon. Salary at the rate of £50 per annum.

CHELTENHAM GENERAL HOSPITAL.—Assistant House Surgeon, unmarried. Salary £80 per annum, with board, lodging and washing.

COUNTY ASYLUM, Shrewsbury.—Junior Assistant Medical Officer. Salary commences at £130 per annum rising £10 a year to £150, with board, lodging, and washing (no liquors).

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—Medical Officer for the Casualty Department for six months. Salary at the rate of £100 per annum. Luncheon provided at the hospital.

EPPINGHAM UNION.—Medical Officers for the Cromer District and the Northrepps District. Salaries each £44 per annum, with the usual allowances for extra medical fees, subject to statutory deduction. Applications to the Clerk to the Guardians, Northrepps, Norwich.

GROVE HALL ASYLUM, Bow, E.—Junior Assistant Medical Officer. Salary £120 per annum with board, lodging and washing. Personal application to the Medical Superintendent.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.—Resident House Physicians.

KING'S COLLEGE, London.—Assistant Dental Surgeon.

LONDON HOSPITAL, Whitechapel road, E.—Obstetric Registrar.

LONDON TEMPERANCE HOSPITAL, Hampstead road, N.W.—Assistant Resident Medical Officer for six months. Salary at the rate of £50 per annum, residence in the hospital with board and washing.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST, Hardman-street, Deansgate, and Bowdon, Cheshire.—Honorary Assistant Physician.

MANCHESTER ROYAL INFIRMARY AND DISPENSARY.—Honorary Ophthalmic Surgeon and Honorary Assistant Physician.

METROPOLITAN EAR, NOSE, AND THROAT HOSPITAL, Grafton-street, Tottenham Court road, W.—A vacancy on Honorary Medical Staff.

NORTH LONDON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Hampstead and Fitzroy square.—Assistant Resident Medical Officer for the Hampstead Hospital for six months. Honorarium at the rate of £20 per annum. Applications to the Secretary, Offices, 41, Fitzroy square, W.

NORTHAMPTON GENERAL INFIRMARY.—Assistant to the House Surgeon for six months. Honorarium £25, with board, lodging, and washing.

ROTHERHAM HOSPITAL.—Assistant House Surgeon. Salary £60 per annum, with rooms, commons and washing.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House Surgeon for six months. Honorarium of £10 given, with board and rooms in the Hospital.

ROYAL MINERAL WATER HOSPITAL, Bath.—Resident Medical Officer unmarried. Salary £100 per annum, with board and apartments in the hospital.

RURAL AND URBAN DISTRICTS IN THE COUNTIES OF LEICESTER, RUTLAND, AND WARWICK.—Medical Officer of Health for the period ending June 30th, 1902. Salary £450 per annum, inclusive of travelling, stationery and other expenses. Applications to the Clerk to the Joint Committee, Lutterworth.

SKAMEN'S HOSPITAL SOCIETY, Greenwich, S.E.—Three Physicians to In-patients, one Physician to Out-patients, one Surgeon to In-patients, one Surgeon to Out-patients, one Ophthalmic Surgeon. The elected candidates will be appointed for twelve months. The Society also requires for the London School of Tropical Medicine, Royal Victoria and Albert Docks, E., a Superintendent and Medical Tutor for twelve months. Salary £250 per annum, and a capitation on the students to be hereafter determined. Board and residence provided.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY, 189, High street, Stoke Newington, N.—Junior Resident Medical Officer. Salary £75 per annum with board and residence.

STEPNEY UNION.—Medical Officer for the Union Workhouse, St. Leonard's-street, Bromley by Bow, E.—Salary £110 per annum, rising £5 annually to a maximum of £130, midwifery and vaccination fees in addition subject to statutory deduction.—Applications to the Clerk, Offices, Barnes-street, Ratcliffe, E.

STOCKPORT INFIRMARY.—Junior Assistant House Surgeon. Salary £2 per mensem, with board, washing, and residence.

THROAT HOSPITAL, Golden square, London.—Second Resident Medical Officer. Salary £50 per annum with board, lodging and washing.

WEST RIDING ASYLUM, Wakefield.—Assistant Medical Officer as Locum Tenens for one month. Salary £3 3s. per week, with apartments and board.

WREXHAM INFIRMARY.—House Surgeon. Salary £80, with board, washing and furnished apartments.

Births, Marriages, and Deaths.

BIRTHS

KENT.—On April 16th, at Lenzie, Dumbartonshire, the wife of R. T. Kent, M.A. Oxon. F.R.C.S., of a son.

MAHOOD.—On April 16th, at Appledore, North Devon, the wife of Allan B. Mahood, F.R.C.S., of a son.

PEARSE.—On April 17th, at Ripley, Surrey, the wife of F. Edward Pearse, M.R.C.S., L.R.C.P., of a daughter.

RENDLE.—On April 20th, at Buckland terrace, Plymouth, the wife of C. B. Russel Rendle, L.R.C.P. Lond. M.R.C.S., of a son.

WHITE.—On April 22nd, at Upper Richmond road, Putney, the wife of E. F. White, F.R.C.S., of a son.

MARRIAGES

BARCLAY—GREENE.—On April 19th, at St. Paul's Church, Clifton, Wilfred Martin Barclay, F.R.C.S., youngest son of the late Surgeon-General Charles Barclay, Madras Medical Service, to Madeline, daughter of the late John Greene, of the Abbey Ruins, Bury St. Edmunds.

BLAND SUTTON—HEATHER BIGG.—On April 21st, at St. Marylebone Church, John Bland Sutton, F.R.C.S., of Queen Anne-street, W., to Edith, youngest daughter of Mrs. Heather Bigg of Radnor-place, W.

COLBY—MANDELL.—On April 19th, at St. Cuthbert's, Haydon-bridge, Carlisle J. G. Ernest Colby, M.A. M.B. Oxon. F.R.C.S. Eng., of Malton, Yorkshire, to Grace Adela, third daughter of the Rev. J. R. Mandell, M.A., Vicar of the parish.

HOBBS—SHAW.—On April 20th, at Jesmond Parish Church, Newcastle-on-Tyne, by the Rev. C. Triffit Ward, M.A., Vicar of St. Peter's, Colchester, cousin of the bride and the Rev. T. Brocas Waters, M.A., Allen Holmested Hobbs, M.B., B.S., to Ethel, second daughter of Benjamin Shaw, Newcastle-on-Tyne.

POTTS—MANN.—On April 19th, at St. John's Church, Ladywood, Birmingham, William Alexander Potts, B.A., M.D., eldest son of the late A. W. Potts, M.A., LL.D., of Fettes College, Edinburgh, to Florence, second daughter of W. S. Mann, M.R.C.S., L.S.A., of Edgbaston, Birmingham.

WORTHINGTON—LOWNDES.—On April 20th, at St. Andrew's Parish Church, Enfield, Sidney Worthington, M.D. Lond., F.R.C.S., of Chesterfield, to Alice Livingston Lowndes, granddaughter of the late Joseph Withers, of Burleigh House, Enfield.

DEATHS

HOGG.—On April 23rd, suddenly, at Palace Gardens-terrace, Kensington, Jabez Hogg, M.R.C.S., F.R.M.S., late of Bedford-square, W.C., in his 83rd year.

HUSSEY.—On April 23rd, at 24, Winchester-road, Oxford, Edward Law Hussey, Esq., F.R.C.S. Eng., aged 83 years.

PRINCE.—On April 22nd, at Crowborough, Sussex, Charles Leeson Prince, M.R.C.S., F.R.A.S., aged 77 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS

MONDAY (1st).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St Thomas's (3.30 P.M.) St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.) Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.)

TUESDAY (2nd).—London (2 P.M.) St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.) St. Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.) London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.)

WEDNESDAY (3rd).—St Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.) Charing-cross (3 P.M.) St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (3 P.M.).

THURSDAY (4th).—St Bartholomew's (1.30 P.M.), St Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) London (2 P.M.) King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.) Metropolitan (2.30 P.M.), London Throat (2 P.M.) St. Mark's (2 P.M.).

FRIDAY (5th)—London (2 P.M.), St Bartholomew's (1.30 P.M.) St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.) Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (6th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) St. Mary's (10 P.M.), London Throat (2 P.M.)

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.) and the Central London Ophthalmic Hospitals operations are performed daily

SOCIETIES

MONDAY (1st).—ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square).—7 P.M. Council Meeting. 8 P.M. Papers.—Mr C. B. Keetley: Limitation of the Gape after Operations on the Cheek and Jaws.—Mr M. Collier: Deformities of the Upper Jaw, Teeth, and Palate due to Nasal Obstruction.

ROENTGEN SOCIETY (11, Chandos-street, Cavendish-square, W.).—7.30 P.M. Council Meeting. 8 P.M. Mr L. Thomas: Fractures of the Forearm (lantern slide demonstration).—Dr W. Cotton: Slides and Photographs illustrating the Work of a Sectorless Wimshurst Machine.

TUESDAY (2nd).—PATHOLOGICAL SOCIETY OF LONDON (20 Hanover-square, W.).—Prof. J. MacFadyean: Congenital Tubercle in a Calf.—Dr F. W. Andrewes: Phagocytosis of Red Blood Corpuscles in a Case of Aseptic Suppuration of the Knee-joint following Injury.—Mr S. G. Shattock: Chromolytic Clumping in Acute Rheumatism and Erysipelas.—Dr F. E. Batten: Further Evidence on the Pathology of Diphtheritic Paralysis.—Mr H. J. Waring: Tumour in the Neck composed of Myeloid Cells.—Dr Still: Tuberculous Ulcers in the Stomach in Children. Card Specimens.—Dr Batten: Tumour of Spinal Cord in a Child.—Mr Waring: Adeno-lipoma of Submaxillary Gland.—Dr Andrewes: Tumour of Sacia Parotidis.—Dr Rolleston: Tumour of Sacia Parotidis.—Dr Rennie: Tuberculosis of Bladder and Kidneys.

WEDNESDAY (3rd).—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Mr Targett, Dr. Purslow and others. Papers:—Mr A. Doran: Fibroid of the Broad Ligament weighing 44½ lb (20 kilogrammes) removed by Enucleation, Recovery with Table and Analysis of 39 Cases.—Dr C. H. Roberts: Note of a Case of a Large Retroperitoneal Fibroid undergoing Suppuration.

THURSDAY (4th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Clinical Evening. Mr A. H. Thompson: Tumour of Iris.—Mr T. Collins: (1) Tumour of Iris (2) Unusual Opacity of Cornea.—Mr A. Lawson: Vascular Formation in Vitreous.—Dr Lediard: Sloughing of Cornea following Fracture of Base of Skull.—Mr Snell: (1) Primary Intraocular Carcinoma (2) Traumatic Ptosis.—Mr Critchett: (1) Solid Œdema of Eyelids (2) Snellen's Artificial Eyes.—Mr M. Davidson: Skiagram of Glass in Eyeball.—Mr Mackay: Skiagram of Foreign Body in Eye.—Mr Rowan: Carcinoma of Lung and Eye.—Mr Batten: Filamentary Keratitis. Cases in place at 8 P.M.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne-street, Edgware-road).—8.30 P.M. Mr C. B. Lockwood: A Series of Cases of Arthrotomy for the Relief of Pain and for the Removal of Synovial Fringes, Loose Bodies, and Fibro-cartilages.

FRIDAY (5th).—WEST KENT MEDICO-CHIRURGICAL SOCIETY (Royal Kent Dispensary, Greenwich-road, S.E.).—8.45 P.M. Dr M. Dockrell: General Health as a Factor in Skin Diseases. (Presidential Address.)

LARYNGOLOGICAL SOCIETY OF LONDON (20 Hanover-square, W.).—5 P.M. Special Discussion on Asthma in relation to Disease of the Upper Air Passages (to be opened by Dr P. Kidd and Dr. P. McBride)

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith, W.).—8.30 P.M. Mr H. J. Paterson: The Use of Gas in General and Dental Surgery together with a demonstration of a new Apparatus for the Prolongation of Nitrous Oxide Anæsthesia.—Dr J. Pardoe: Some Modern Methods of Treating Chronic Urethritis in the Male.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

WEDNESDAY (3rd).—SOCIETY OF ARTS.—3 P.M. Mr W. H. Preece: Aetheric Telegraphy.

ST JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr M. Dockrell: Elementary Lesions of the Skin and their Differential Diagnosis. (Post-graduate Course).

THURSDAY (4th).—CHARING-CROSS HOSPITAL.—4 P.M. Dr Green: Medical Cases in the Wards. (Post-Graduate Class.)

Notes, Short Comments, and Answers to Correspondents

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

TO SUBSCRIBERS

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and not to THE LANCET Offices.

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect.

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The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied. Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND.

THE MEDICAL PROFESSION AND THE STORES SYSTEM.

WE have received from a correspondent a letter in which he calls attention to a matter of which we have already taken notice—namely the fact that certain Stores are able by arrangement with medical men to offer to their customers medical attendance at a reduced tariff Our correspondent having found an advertisement in the list of the Stores in question which stated that arrangements beneficial to members had been entered into with certain practitioners, wrote and asked for the names and addresses of the medical men in question The answer which he received from the Stores has puzzled us considerably, as one of the medical men to whom he was recommended to apply for advice and treatment has been dead for a long time a fact which suggests that he was consulting an ancient Stores list while his letter expressly mentions that the correspondence occurred the other day and the Stores secretary's letter was dated March 28th, 1899

The current list of the Stores in question contains the following notice to members :—

MEDICAL.

Special Arrangements beneficial to Members have been made with several Medical Practitioners. Particulars may be obtained on application to the Secretary

When the subject was previously under notice in our columns we said that we could well believe that members of the medical profession had entered into arrangements without much consideration that seemed to us to be open to very obvious objections. We think so now Such arrangements involve advertisement of the names of practitioners to the patients of other practitioners promiscuously We feel sure that the gentlemen whose names are so published would not publish their names on any private circular for distribution to the patients of other practitioners. Secondly there is no need whatever in our opinion for the concessions offered by the Stores to their members. Private practitioners are quite ready to make every allowance in those cases where the means of their patients are limited The tendency of such arrangements as those which the Stores invite their members to enter upon with medical men is to attract shabby or ungenerous persons who wish to pay less for their medical attendance than they can afford. Evil is notoriously often wrought by want of thought and we make these criticisms in confidence that they will be well received by those concerned, and with the conviction that arrangements with Stores to supply medical service are entirely out of place and derogatory to the dignity and fraternity of our profession

We made comments almost identically to this effect some four years and a half ago (THE LANCET Sept. 8th, 1894) and we then received a letter signed Oculist," the writer of which put before our readers with some plausibility his reasons for thinking that, as far as his branch of the medical profession was concerned these arrangements with Stores were correct. In 'Oculist's" opinion no advertisement of the practitioners recommended by the Stores was involved in the arrangement between these gentlemen and the Stores, because neither the name nor the fee can be ascertained except upon inquiry " We did not and do not agree. The answer to such inquiries is an advertisement—and a very good advertisement—for the oculist of whom the name and address are given The information is not furnished under seal of secrecy and is sure to be disseminated Next 'Oculist' thought the arrangements unobjectionable because the specialist would receive under them the fee which will nearly always be accepted if circumstances are pleaded " Again we did not and do not think much of his argument. Charity is the greatest pleasure to many nay, to most of the medical profession but the members of the profession ought to be allowed to dispense their own charity Every person who is a member of the Stores does not *ipso facto* become a proper object to be seen by an oculist at half price, the special circumstances pleaded—viz. the possession of a Stores ticket—not being in our opinion such as should move the most sensitive oculist to compassion We cannot see that the specialist's position differs from that of the general surgeon or physician in the least, and every member of the medical profession will feel that such arrangements as those under discussion are undignified and nearly if not quite unprofessional. However discreetly the announcement in stores lists may be made the fact remains that medical service is not a commodity which should be offered by trading corporations to the community at reduced prices, and we regret that medical men should be found to take any other view

SUPERFLUOUS HAIR.

To the Editors of THE LANCET

SIRS—If any of your readers who can speak from experience in reference to the treatment of superfluous hair would give me their advice I should be exceedingly obliged A young lady 26 years of age of great beauty and whose attractiveness of character as well as of features gives her entrance to society wherever she goes, is afflicted with a growth of hair on the upper lip. She is developing a moustache of a dark colour and it is now about one-eighth of an inch long It is slowly growing and is a matter of annoyance and anxiety to her friends as well as to herself. In the circumstances it is most desirable that such a disfigurement should be removed. I have by me Dr Balmanno Squire's excellent little book on Superfluous Hairs," and although he dwells at considerable length on its treatment by electrolysis he still describes it 'on the whole a successful method" and admits that it is a tedious and painful process. I am unwilling to subject my young friend to this ordeal unless I can be assured that it is the best and a certain remedy, and before doing so I am most anxious to have the opinion of others in regard to this mode of treatment or any other which they may consider better I hope this letter may bring me some assistance

I am, Sirs, yours faithfully

April 24th, 1899. M.D.

A CORONER UPON MEDICAL EVIDENCE AT INQUESTS.

THE following paragraph is extracted from the *Northern Daily Telegraph* of April 24th and is a curious confirmation of the remarks which we made in these columns a week ago.

SUDDEN DEATH OF A COLNE PREACHER.
CORONER AND THE DOCTORS.

To-day Mr Robinson, coroner, held an inquest at the Town Hall, Colne on James Holgate aged 65 years, a local preacher of 2, Gosling yard, Colne. Deceased had been a soldier and afterwards a general dealer Latterly he had lived on a small competency To the time of his death, 1 15 A.M last Friday he appeared to enjoy the best of health. At the time named his wife found him walking about the bedroom rubbing himself, and shortly afterwards he flung himself on the bed and died. After the widow had given evidence a juryman suggested that medical evidence should be called.—The Coroner If you have a post-mortem you must have a doctor If the doctor only sees the dead after death he can give no more scientific evidence than you can. I should not like my relatives to be cut up and mauled by doctors.—A verdict of Death from natural causes" was returned.

If this brief account of the proceedings at the inquest upon James Holgate is substantially accurate we have no hesitation in saying that the coroner showed himself to have no real grasp of his business. Here is a man no reason for whose sudden death is suggested. After the widow's evidence a juryman asks for medical evidence, and it would seem very properly His request is pooh pooh'd by the coroner sitting to find out the cause of death for two reasons: (1) that a medical man can give no more scientific evidence than a layman when a man is dead which is not correct and (2) that he (the coroner) would not like to have his relatives cut up and mauled, which is silly Now coroners are judges and should not be inaccurate or silly in their judicial capacity

THE CREED OF THE SPIRITUAL HEALER.

THE *Critic* publishes some amusing verses on the creed of the spiritual healer Two members of this sect, which seems to be another name for the Christian Scientist have informed an interviewer that to keep in good health what you want to do is to think that you can't be ill. Try and (*sic*) remember that the body is nothing, The poet of the *Critic* after musing on the foolishness that has beset men who for generations have suffered and even died without using so easy a therapeutic measure sings thus :—

* * *

For the body's nought at all,
Rich and poor and great and small,
Thin and fat,
Man is nobody you'll note
There is nothing in his coat
Or his hat.

Should you lose your legs anon,
Never think of grafting on
Legs of cork
Don't believe you're even lame
Put your boots on all the same
Rise and walk!

* * *

Never work and never sad
Hunger's nothing but a fad
Feed the mind
When on nothing you are cloyed,
If you feel a kind of void—
Think you've dined.

* * *

THE PIGMIES OF CENTRAL AFRICA.

ON April 13th at the Camera Club in Charing Cross-road Mr Alfred Lloyd of the Church Missionary Society gave an interesting account of a journey through the Central African forest where the pigmies live. This forest lies immediately to the west of the Mountains of the Moon and is almost continuous with the lower slopes of these mountains. He was in the forest a day or two without meeting pigmies the first one he saw was perched in a tree and was for a moment supposed to be a monkey Several of them, headed by a chief, soon came to him in a friendly manner and he was able to converse with them quite freely in the language spoken in the country of Toro to the east of the Mountains of the Moon. He gathered from them that they were from 8000 to 10,000 in number and that the size of their forest reckoned in days journeys was about 100 miles in breadth by from 100 to 200 miles in length. The majority of the pigmies were under four feet in height. He was not able to measure them individually but he arrived at this estimate by finding that any of them could stand under his arm. Although well provided with photographic materials he was not able to take likenesses of them because they had a great objection to come into any open space

such as where a river flowed and in all the other parts of the forest owing to the luxuriance of the vegetation the light was no greater than twilight, so that it was insufficient for a snapshot with a camera and none of the pigmies could be induced to remain still for the time necessary for a long exposure Although so short in stature they were extremely muscular On their arms they wore bangles which were retained in position by the protuberance of the biceps muscle and Mr Lloyd when he tried on their bangles found that they were much too large to fit his arms. At his first meeting them he had but little fresh meat and they brought him a fine antelope the same day He obtained from them specimens of bows, arrows spears, and horns for producing sound lantern views of all of which were shown on the screen Vegetable creeper was used for the bow strings and pieces of leaf for the feathers" of the arrows the horns were made of elephant s tusk. When the arrows were poisoned they caused almost instantaneous death Mr Lloyd was not able to ascertain the nature of the poison He was told that it was made by mixing putrid meat and red ants, but he doubted the accuracy of the information.

A SAD CASE.

To the Editors of THE LANCET

SIRS —Can any of your readers inform me of any home where a young girl, 15 years of age could be placed She is three months pregnant by her own father and it would be advisable to remove her from her present surroundings as soon as possible

I am Sirs, yours faithfully

April 19th, 1899. MEDICUS

A STOCKING SUSPENDER.

THE Portia combined stocking suspender and shoulder support consists of one long piece of elastic pink webbing three-quarters of an inch wide the middle of which forms two loops, one to go over each shoulder and under the arms These loops meet in a special centre clip or crossing buckle in the middle of the back and from this the usual elastic bands pass down to the stockings. This suspender is very simple in use, completely avoids the injurious compression of the limbs caused by garters and has the further advantage that the stockings are held up not from the waist but from the shoulders. The makers are the Portia" Company 202, Romany road, West Norwood, Surrey

SIR WILLIAM JENNER S FORTUNE.

IN a recent article in alluding to Sir William Jenner s will, we mentioned that a certain proportion of his money was derived from relatives. We are now informed that the accessions to his wealth received in this way consisted only of the sum of £3000 and his house at Bishop s Waltham. So that substantially Sir William Jenner made his own fortune. His investments were always judicious.

A REMARKABLE PLAGUE OF FLEAS

A CORRESPONDENT asks whether we can give him any information on the following matter A friend of his has a house which, by the carelessness of a dirty tenant, became infested with fleas. One room especially was affected, and when a new tenant took the house the floor of the room was relaid but without appreciable effect. By leaving the room empty and constantly washing with strong carbolic the nuisance was kept within bearable limits, but when the last tenant left the plague increased again. The empty house has been twice powerfully fumigated, with doors and windows stopped, but this has not cured the trouble Can any of our readers suggest anything effectual in such an aggravating case

THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H KINGSLEY HUNTER, L.S.A."

To the Editors of THE LANCET.

SIRS,—The undermentioned donations have been received, making a total of £53 1s 6d. I am Sirs, yours faithfully

RIVERS WILLSON Treasurer

42, Wellington-square, Oxford, April 25th, 1899.

	£	s.	d.		£	s.	d.
Dr Latham, Cambridge	5	5	0	Dr A. G Bateman ...	1	1	0
Mr Joseph Smith	1	1	0	F R.C S. Eng ...	0	10	6

"WANTED A HOME FOR AN EPILEPTIC."

To the Editors of THE LANCET

SIRS —Your correspondent in THE LANCET of April 22nd, Dr J Ross MacMahon should apply to Mr G Penn Gaskell, 12, Buckingham street, W C., the secretary of the National Society for the Employment of Epileptics, from whom he will obtain particulars and the necessary papers for admission into the society s colony at Chalfont-St. Peter Bucks. I am, Sirs yours faithfully

Queen Anne-street W., April 22nd 1899. W ALDREN TURNER.

A QUESTION OF ETIQUETTE.

To the Editors of THE LANCET

SIRS —In the next issue of THE LANCET would you be good enough to give your opinion of the etiquette concerned in a case the facts of which I append. A. B. is in attendance on a patient. On a certain day at 6.30 P M a messenger comes from a patient to A. B. saying that the patient s brother is bringing his doctor X Z., to see the patient, that the train by which they are coming is shortly due, and that they will arrive at the patient s house at 6.50 could A. B. meet X Z. at that hour? A.B says he cannot, but that X Z may examine the patient if he wishes and call on A. B. afterwards. In an hour s time X Z. calls on A. B. and discusses the case but offers no explanation of his conduct. On the next day A.B. sees his patient and makes final arrangements for the performance of a small operation on the morrow Some few hours after the said visit the patient's mother calls on A. B and informs him that the patient s brother has removed the patient to his own house and placed her under the care of X Z. who takes over the treatment of the case.

I am, Sirs, yours faithfully

April 25th, 1899. A. B

*** Y Z. should if possible have arranged to meet A. B to discuss the patient s condition and treatment with him. At the interview he should have told A. B of the intended transfer of the patient to him. He cannot be held responsible for the wishes of the patient or of the patient s friends.—ED L.

Foreign Diploma.—The Act (the Medical Act, 1859) says that a person not a British subject who shall have obtained from any foreign university a degree or diploma of Doctor in Medicine and who shall have passed the regular examinations entitling him to practise medicine in his own country" shall be allowed to act as resident physician or medical officer of any hospital established exclusively for the relief of foreigners in sickness, provided always that such person is engaged in no medical practice except as such resident physician or medical officer" Under certain circumstances however the possessors of foreign medical diplomas can be registered for colonial practice (49 & 50 Vict. c. 48) The fee for such registration is £5. The question should be submitted to the Registrar of the General Medical Council 299, Oxford-street, W

Enquirens—The possessor of the degree of Ph.D., like the possessors of the degrees of LL.D Mus.D D Sc. or D D is a doctor" and has the right to style himself so on his door-plate and visiting-card. We do not gather that the gentleman in question is pretending to be a medical doctor so that there is no question of his contravening the Medical Acts. Our correspondent s doubts as to the possession of a medical qualification can be cleared up by consulting the Medical Register

Queen s Hotel.—We do not recommend specialists or any practitioners by name. Our correspondent should ask his medical man if a second opinion is required and whose services he would recommend under the circumstances.

Physician.—Speaking generally we think that the officers in question and their families should receive the gratuitous attendance that is always placed by the profession at the disposal of brother practitioners

E. D C. (Walton)—His services must be limited to dispensing and giving such assistance as is permitted under the recent regulations of the General Medical Council (*vide* THE LANCET Nov 27th, 1897 p. 1424

Ethics—The publicity is unfortunate, but we do not see any evidence that the medical man in question is responsible for the paragraph.

X Y Z—Yes The medical man invariably tries to spare the nurse the task, but in many circumstances it will be her duty

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METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 27th, 1899.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rain fall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
April 21	29·92	S	0·11	66	43	45	45	46	Raining
" 22	30·20	E.	0·20	80	50	37	41	43	Cloudy
" 23	30·31	S.W	0·05	102	56	42	44	47	Cloudy
" 24	29·84	S.W	0·03	99	57	46	47	51	Overcast
" 25	29·47	S.W	0·30	99	58	43	51	52	Cloudy
" 26	29·52	N W	0·26	91	56	45	46	49	Cloudy
" 27	29·91	N E.	..	63	55	48	48	51	Cloudy

During the week marked copies of the following newspapers have been received *Gloucester Journal, Huddersfield Chronicle, Whitehaven Advertiser Kilmarnock Herald Hawick Advertiser Manx Sun, Montrose Review Leeds Mercury Times of India, Pioneer Mail Caithness Courier Peterhead Sentinel, Architect, Citizen, Scotsman, Builder Liverpool Daily Post, West Lothian Courier South Durham Mercury East of Fife Record Warwick Times Bristol Mercury, Macclesfield Courier Dunoon Herald, Wakefield Herald, Jarrow Express Normanton Herald, Stockport Advertiser Newcastle Journal, Yorkshire Post, Nottingham Guardian, Manchester Courier Pontefract Telegraph, Coventry Herald Colchester Telegraph, Cheshire County News Fife News Public Health Sanitary Record Brighton Gazette, Local Government Chronicle, Mining Journal, Reading Mercury City Press Hertfordshire Mercury North London Echo, Surrey Advertiser Southport Visiter China Mail, Herald Standard (Melbourne), The Clarion, Local Government Journal Weekly Times and Echo Northern Daily Telegraph, Durham Chronicle, Liverpool Journal of Commerce Birmingham Gazette, Oxford Times Weston super Mare Gazette, Morning Herald Mandalay Herald, &c. &c.*

Communications, Letters, &c., have been received from—

A.—Dr James Adam, West Malling; Messrs. Arnold and Sons, Lond. Association for Pure Calf Lymph, Lond. Mons J Astier, Paris; A. McL.; A. A. L. Aston Union, Clerk of

B.—Mr Jesse Boot, Nottingham; Dr L. S Beale Weybridge Bayer Co Lond.; Dr W Bryce Edinburgh Messrs. Boulton and Paul, Norwich T B Browne, Ltd., Lond. Messrs. Baker and Startin, Lond. Messrs. Bedford and Co. Lond. Messrs. W H. Bailey and Son Lond. Mr S H Benson, Lond. Messrs. A. and C Black, Lond.; Mr C Birchall, Liverpool Mr A. S Barling, Lancaster, Bovril Ltd., Manager of; Messrs. F L. Borthwick and Co. Lond. Burton-on Trent Infirmary, Secretary of

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D.—Mr C J Denny Blackwater; Messrs. Davy, Hill, and Son, Lond.

E.—Mr T S Ellis Gloucester; Edinburgh Life Assurance Company, Secretary of

F.—Mr C L. Fraser Berwick upon Tweed Dr W J Fleming, Glasgow Dr W W E Fletcher, Lond.

G.—Mr A. J Greene Liverpool, Messrs. Green and Houk, Lond., Messrs. Giles Schacht and Co, Clifton Messrs. W Gaymer and Son, Attleborough Mr W A. Garrard, Rotherham.

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I.—Mr A. Irwin Hakalau Hawaii, Income-Tax Adjustment Agency Lond.

J.—Mr Raymond Johnson Lond.; J H. M J B

K.—Dr C F Knight Edinburgh Dr R. Kirk, Glasgow; Mr H. Kirby, Crosshills Mr Henry Kimpton, Lond.; Messrs. Kröhne and Sesemann, Lond.

L.—Mr H R. Lewis Lond., Messrs. T Lewin and Co, Lond. Mr Hugo Lorenz, Lond., Mr A. B. Little, Leeds.

M.—Mr T H. Morse Norwich Mr A. MacDonald, Washington, U.S.A. Mr J D Malcolm, Lond. Dr J Monteith, Oldham Manchester Clerical &c., Association; Mr J Murray Lond., Medical Society of Victoria, Melbourne, Secretary of; Messrs. Masson et Cie, Paris; Mr J Macfarlan, Newbiggin by the-Sea, Maltine Manufacturing Co., Lond. May's Advertising Offices, Lond Dr D Mohall, Glasgow Mr T Meredith, Coventry, Medical Graduates College, Lond., Medical Superintendent of Mr J Y W MacAlister, Lond Mr M McDonald Belfast Messrs. Macmillan and Co, Lond. Manchester Royal Infirmary

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X.—X Y Z

Y.—Mr M. Yearsley Lond. Dr Meredith Young, Crewe.

Z.—Ziddah.

Letters, each with enclosure, are also acknowledged from—

A.—Mr I C Allen, Dudley, A. C

B.—Mr D Brereton, Gildersome Birmingham Free Hospital for Children, Secretary of Bradford Royal Infirmary, Secretary of Dr G F Blandford Lond. Sir H R Beevor Bart Lond. Dr W W Baldwin Florence Mr T H Brocklehurst Kinson Dr W H. Bourke Lond.; Bradford Children's Hospital, Secretary of; Mr H Brice, jun Exeter; Messrs J Bell and Co., Lond. Dr H. P Berry Grantham, Mr A. W Ball Manchester; Mr E. Blatchley Lond.; Bronygarn, Maesteg, Mr H Butterfield, Northampton Barnwood House Hospital Gloucester Medical Superintendent of Branch Manchester Mr W L. Byham Sunbury Mrs. R. S Browett, Coventry

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E.—Dr R Edwards Colwyn Bay H B E M McE. E J S Etablissement Thermal d Uriage, France

F.—F W T

G.—Dr D Grant, Lond. Messrs. Gale and Co., Lond. Grove House Private Asylum Church Stretton, Proprietor of; Mr H L. Gill Halifax; G P E. Dr R. Griffith Netherton Messrs. Garland Smith and Drake Lond.

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S.—Mr J W Scott, Wolverhampton Sister Kew; Springfield House Asylum, Bedford Medical Superintendent of; Southport Infirmary Secretary of Surgeon, Leeds.

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Mr CHARLES GOOD, THE LANCET Office, 423, Strand, London, to whom all letters relating to Advertisements or Subscriptions should be addressed.

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A Clinical Lecture

ON

SECONDARY MELANOTIC SARCOMA OF THE LIVER

Delivered at St George's Hospital on Feb 6th, 1899,

BY H D ROLLESTON, M.A., M.D CANTAB., F.R.C P LOND,

PHYSICIAN TO ST GEORGE'S HOSPITAL

A MAN, aged 59 years, was admitted to St, George's Hospital on Jan. 5th, 1899, complaining of abdominal swelling, of œdema of the legs and scrotum, and of great weakness Two years before the vision of the right eye had begun to fail and on Feb 13th 1897, the globe was removed for melanotic sarcoma Mr C D Marshall, the curator of the Royal Ophthalmic Hospital, Moorfields, kindly sent up a beautiful microscopic section of the globe of the eye showing the retina detached and pushed forwards by a mixed-celled sarcomatous growth This growth was cut up by spaces which may have contained blood so as to appear somewhat alveolar, the cells of the growth were spindle-shaped and often contained pigment and round or slightly oval cells which were generally free from pigment After looking many times at the section I am inclined to think it is a mixed-celled sarcoma, although I am fully alive to the fallacy of regarding the cross section of a spindle cell as a round cell.

On admission the patient s abdomen was found to be enlarged and distended and the cutaneous veins running over it were dilated and prominent No ascites could be made out and the enlargement was found to be due to an enormous liver, the surface of which was knobby and irregular The liver reached in an upward direction to the fifth rib in the nipple line and extended downwards below the anterior superior spines of the ilium It was tender on palpation The urine (the specific gravity of which was 1030) was clear and of a natural colour when passed, but on standing or on the addition of nitric acid or a solution of perchloride of iron, a dark-brown colour developed due to melanin There was a cloud of albumin in the urine. The legs were œdematous and the scrotum and penis were much swollen Bronchitic sounds were heard over both lungs The heart was normal The skin had a slightly dirty appearance but there was not sufficient change to say that it was definitely pigmented. No other secondary growths were found There was a little colourless discharge from the right orbit The patient became progressively weaker and suffered considerably from orthopnœa, which appeared to be due to the abdominal distension encroaching on the thorax, and although there was no manifest signs of ascites the question of tapping the abdomen to relieve the pulmonary embarrassment was considered, but it was decided against. The liver enlarged in its dimensions while under observation and œdema of the left side of the chest developed The man died after being in the hospital for 18 days, during which time his temperature had been almost entirely subnormal. Treatment was confined to relieving pain by hypodermic injections of morphia

At the necropsy, which was performed by Dr W S. Lazarus-Barlow there was no local recurrence in the right orbit There was a little clear yellow, ascitic fluid which however became dark on the addition of solution of perchloride of iron, showing that melanogen was present The liver weighed 15 lb 12 oz. and showed discrete growths both in the capsule and on section and areas of diffuse infiltration with growth The nodules of growth were of various sizes and colours—some white, some variegated, others black. The areas of infiltration were as a rule more pigmented than the nodules In one part the liver tissue was replaced by black, infiltrating growth somewhat softened and oozing a black juice. There were some small secondary nodules on the under surface of the right leaflet of the diaphragm, but no inflammation past or present of the capsule of the liver or of the diaphragm There were no growths in connexion with the gall bladder or bile-ducts and no calculi in the gall bladder There was an enlarged gland resting on the portal vein but not compressing or invading it, the portal vein was normal The inferior vena cava was dilated and distended with post-mortem blood-clot, this was due to the liver pressing on, and obstructing the flow through, the vein just before the latter passed through the diaphragm. There was a minute growth in one adrenal body and two small almost unpigmented growths on the mucous membrane of the small intestine There were no growths in the kidneys, spleen, or peritoneum The lungs were free from growth, but there was collapse of both the lower lobes with very marked engorgement There were a few adhesions at the left base, but no signs of pleurisy or adhesions on the right side and no effusion or growths in the thoracic cavity The veins at the lower end of the œsophagus were dilated and prominent, showing that the collateral circulation between the gastric vein opening into the portal system and the œsophageal veins opening into the azygos vein and so into the superior vena cava had been well developed as if to compensate for portal obstruction. Microscopically the growth was alveolar and composed of spindle and oval cells, some of which were deeply pigmented while others were quite free from melanin Some of the alveolation was undoubtedly due to the cells of the growth being inside and distending the capillaries of the liver, as in the primary growth so here the distribution of pigment was most irregular and capricious

In this case the diagnosis was perfectly easy, as the history of removal of a melanotic sarcoma from the right eye left very little doubt that the enlargement and nodular condition of the liver was due to recurrence in that organ As a proof that this diagnosis was correct the presence of melanin in the urine was all that was necessary, but another proof which would if present have further clinched the diagnosis was the presence of secondary melanotic nodules in the skin.

The occurrence of secondary melanotic sarcoma in the liver is well known and is such a striking morbid lesion that once seen—and all museums have specimens illustrating it—it is never forgotten Since this is a condition everyone is familiar with and is a matter, so to speak, of common knowledge it might be thought that it is frequently met with in ordinary hospital work This is hardly the case, for since I have been in touch with the post-mortem room at St George's Hospital (a period of nine years) there has only been one other example, though two years previously (in 1888) there was a case of melanotic sarcoma of the liver thought to be primary in that organ

With regard to the pathological anatomy, melanotic sarcoma is usually primary on the uveal tract, in a much smaller number of cases it arises in the skin, especially in pigmented moles, in a few exceptional instances—of which I have examined one—it occurs in the rectum, and lastly it appears to arise primarily in the liver Of the latter class I have only been able to collect 10 examples and two of these are not absolutely above suspicion Histologically melanotic sarcoma is composed of large spindle, oval, or oat-shaped cells and so justifies its title to the name "sarcoma." In many cases a similar pigmented growth which generalises in the same manner is composed of round cells and has an alveolar arrangement so resembling carcinoma There has been a tendency to consider every melanotic tumour as *ipso facto* sarcomatous Structurally, however, many of them are exactly like carcinoma with the addition of pigment in the cells. There are other ways in which many of the cases usually called "melanotic sarcoma" approach the carcinomatous type Thus both in the uveal tract and in the skin the primary tumour arises if not absolutely from pigmented epithelium at any rate, in the closest contact with that epiblastic tissue Like carcinoma it may spread by the lymphatics, though it must be remembered that it generalises chiefly by the blood stream There is, however, a reaction against the view that malignant melanotic tumours are always sarcomatous and a number of melanotic carcinomata both of the skin (Bowlby,[1] Solly,[2] and Hutchinson[3]) and also of the liver (W Legg[4] and Hale White[5]) have been described Lancereaux, indeed, in his recent Traité des Maladies du Foie et du Pancreas," goes so far as to consider that the great majority of pigmented hepatic tumours are carcinomatous On the other hand, it must be remembered that undoubted sarcoma has a great tendency, probably because it so often grows inside the capillaries, to

[1] Transactions of the Pathological Society vol. xli., p. 314
[2] Ibid., p. 315. [3] Ibid., vol. xliv., p. 1[illegible]3.
[4] St. Bartholomew's Hospital Reports, 1877 vol. xiii., p. 160.
[5] Guy's Hospital Reports, 1[illegible]30 p. 73.

assume an alveolar form in the liver From the unsettled state of opinion at the present time some authors prefer to speak of the pigmented tumours in the liver, whether primary or secondary, as "melanomas" or simply as "pigmented tumours," without labelling them as "sarcoma" or "carcinoma." In the meanwhile we should judge each case on its microscopic merits and not assume that a pigmented tumour is necessarily sarcomatous It is not, as far as can be seen at present, a matter of any great clinical importance what the exact structure of a malignant melanoma is, though more careful classification in the future might be expected to show that there was some difference in the rapidity of generalisation The truly sarcomatous would *a priori* be expected to be the more malignant In the remarks which follow the term "melanotic sarcoma" will be used, as it generally is, as synonymous with malignant pigmented tumours

In its age incidence malignant melanotic growths resemble carcinoma and rarely occur in early life as the other forms of sarcoma do In 103 cases of sarcoma of the uveal tract, all of which except one, where no note was made, being more or less melanotic, collected by Lawford and Collins[6] the average age was 48 4 years, the extremes of age being 15 years and 84 years In 35 cases of secondary melanotic growths in the liver which I have collected the average age almost exactly corresponds to this, being 48 7 years, or 46 7 years for the males and 53 3 for the females, the extremes being 27 years and 75 years As to sex, of Lawford's and Collins's 103 cases 59 were males and 44 were females, in my 35 collected cases where the sex was stated 25 were males and 10 were females, this shows a much more marked preference for males than in the series of primary growths of the uveal tract The right eye was affected 41 times and the left 60 times in Lawford's and Collins's cases, while in the cases I have collected of hepatic growths the right eye was rather more frequently the primary seat of growth but the numbers are small

Secondary melanotic tumours of the liver are more often secondary to a primary growth in the uveal tract than in the skin Thus, in 36 cases of a melanotic sarcoma in the liver the primary growth was 24 times on the eye and 12 times in the skin This is partly due to melanotic sarcoma being commoner in the uveal tract than in the skin Examination of the recorded cases shows that the growths in the liver following cutaneous melanosis are not so big or so striking as those following melanotic sarcoma of the uveal tract In most of the cases I have collected where the liver contained secondary growths following cutaneous melanosis the organ was little above the ordinary size, though in two cases it weighed over 7 lb, while on the other hand some of the largest livers recorded have been due to melanotic sarcoma originating in the eye Thus Litten[7] has described a case where the liver weighed 27 lb, Sayre[8] one of 23 lb, and Hamburger[9] one of 22 lb The average weight of the liver in 22 cases of melanotic growth secondary to a growth in the uveal tract was 13 lb 3 oz In cases of primary melanotic growths of the skin there is a marked tendency to wide and general dissemination of the secondary growths, more so perhaps on the whole than in the primary growths of the uveal tract

The liver is a very favourite site for secondary infiltration in melanotic sarcoma of the uveal tract In a few cases it is found to co-exist with an intra-ocular growth, but it usually occurs within three years after removal of the eye and generally without there being any local recurrence in the optic nerve or orbit It would thus appear that the infective cells of the growth must remain latent in the liver for some time The liver may indeed be the only organ in the body affected, while in other instances almost every viscus and tissue shows metastases Melanotic sarcoma is the only form of sarcoma which is often seen in the liver, the lungs, on the other hand, are the seat of election for ordinary secondary sarcoma, the infecting cells of which travelling by the blood are caught in the lungs, which thus to a certain extent protect the rest of the body against sarcomatosis It is plain that in carcinoma of the alimentary canal the liver plays the same rôle It is remarkable that the cells of melanotic sarcoma being, as they usually are, larger than the cells of the other sarcomata which are stopped by the lungs manage to pass through the pulmonary capillaries and to infect the liver The liver may show a number of discrete nodules, may be diffusely infiltrated with growths so that it resembles granite, or in extreme instances it may look as if it had been steeped in pitch, or a combination of these two conditions may exist, parts of the same liver being differently affected. Some of the growths may be free from pigment, others show a little and then have a greenish or variegated aspect The diffusely infiltrated areas may be softened and exude an inky juice. Pigmentation of the liver may occur in conditions other than melanotic tumours. It is hardly necessary to refer to the post-mortem blackening of the parts of the liver in contact with the stomach and intestine This common appearance is due to sulphuretted hydrogen formed in the alimentary canal passing into the adjacent substance of the liver and there meeting with iron and producing sulphide of iron. This discolouration of the liver is almost entirely superficial Pathological pigmentation of the liver does also occur in melanæmia and in some rare cases of cirrhosis, especially when the cirrhosis is associated with malaria or diabetes (bronzed diabetes) The pigment is almost certainly due to blood destruction and is directly derived from hæmoglobin, it is therefore quite distinct from melanin It is more striking when seen under the microscope than to the unaided eye The pigment granules occupy the liver cells and the fibrous tissue The specimens of pigmented cirrhosis which I have seen have appeared of a reddish brown colour to the naked eye and did not resemble the diffuse infiltration seen in melanotic sarcoma. As a curiosity anthracosis of the liver or the presence of coal particles in its substance may be mentioned Professor Welch[10] found this associated with cirrhosis

To consider now in detail some of the symptoms of melanotic sarcoma A complaint of great weakness is not infrequently made by patients This may be explained by the following hypotheses It might be the result of such extensive destruction of the liver substance that the organ fails to do its work of stopping poisons which in the ordinary course of events are absorbed from the alimentary canal and then destroyed or rendered innocuous This condition of hepatic inadequacy leads to the body becoming flooded with poisons which produce great feebleness and loss of appetite The latter symptom was present in this case and of course tends to increase the patient's weakness Hepatic inadequacy would also interfere with the absorption and proper assimilation of food In some cases such hepatic inadequacy may further lead to a toxæmic condition resembling uræmia and to numerous hæmorrhages There is another possible explanation, that the new growth produces a poison which leads to the cachexia seen in malignant disease This is perhaps less probable in sarcoma than in carcinoma, but it is a theory which appeals to one's mind at the present time when the importance of internal secretions is becoming recognised and cannot be lightly put aside. Heaviness or pain in the hepatic region is due to the distension of the liver by the rapidly increasing growths inside it, this tension also accounts for tenderness on pressure. When implicating the capsule the nodules of growth may give rise to local inflammation of the peritoneum and so to sharp pain aggravated by respiration On one occasion the patient did complain of stabbing pain in the right side, but no remains of past perihepatitic inflammation or pleurisy were forthcoming at the necropsy to explain it Shortness of breath may occur from the enlarged liver pushing up the diaphragm and compressing the lungs and this was marked in the present case Compression and displacement of the thoracic organs may also be due to concomitant ascites and these may be temporarily relieved by removing the fluid It has been stated that ascites is rare or even that it does not occur in melanotic sarcoma of the liver, but this is not borne out by the cases I have collected, for it was stated to be present in 10 of the collected cases of second melanotic disease of the liver, and in at least three of the primary melanotic growths of the liver there was ascites, in the case examined by Dr Penrose in this hospital in 1888 there was as much as three gallons of fluid

In a few cases the ascitic fluid has been pigmented, in our case it was clear, but treating it with ferric chloride showed the presence of melanogen, the colourless form in which the melanin is often passed in the urine I ought, however, to mention that Dr Garrod told me that in two

[6] Royal London Ophthalmic Hospital Reports, vol. xiii., p. 104

[7] Deutsche Medicinische Wochenschrift, 15, S. 41, 1889.

[8] Transactions of the New York Pathological Society, 1879, vol. iii., p. 42.

[9] Johns Hopkins Hospital Bulletin, March, 1898.

[10] Ibid., 1891.

similar cases tested by him the ascitic fluid did not give any such reaction As to the way in which ascites is produced in these cases it may be due to the great obstruction to the passage of blood through the hepatic capillaries, Hektoen and Herrick[11] have recently called attention to the widespread intracapillary masses of growth in melanotic sarcoma of the liver The resulting condition of obstructed circulation through the liver thus to some extent resembles that in cirrhosis of the liver, and it is interesting to note that in our case the collateral circulation between the portal vein and the general systemic veins was well developed at the lower end of the œsophagus This compensation may have accounted for the comparatively small amount of ascites In a case of melanotic sarcoma of the liver, possibly primary, recorded by Frerichs, the collateral circulation was well developed and there was no ascites There are other ways in which melanotic sarcoma of the liver might give rise to peritoneal effusion, such as the production of portal thrombosis by extension of the growth into the portal vein or its branches, the pressure of growths on the trunk of the vein, and, lastly, by other secondary growths in the peritoneum causing an inflammatory effusion as opposed to the passive transudation in the foregoing

Jaundice was not present in this patient and is generally absent Its presence may easily be brought about by a growth exerting pressure on the ducts, but it so happens that this is a rare accident. It was stated to be present in six cases of those collected. The œdema of the feet was in this case due to pressure on the inferior vena cava and is a frequent symptom in these cases, but in some instances it may be due to other factors such as cardiac debility The œdema of the scrotum and chest wall are similarly explained by pressure on venous tracts but are less frequently seen

The urine in this patient was, as is usually the case, clear when passed but subsequently darkened on standing and exposure to the air A black ring or colouration could also be obtained by the addition of solution of perchloride of iron or nitric acid It is well to employ both these reagents so as to avoid mistakes, for the urine of patients taking salicylic acid turns of a dark purple colour with ferric chloride and a blackening may occur under other conditions with ferric chloride, and yet no change occurs on adding nitric acid Again, in urines containing much indican the addition of nitric acid gives a dark ring, but ferric chloride has no such effect Sometimes in melanotic sarcoma of the liver the urine is brown or dark coloured when evacuated and it then contains melanin Usually, as has already been said, it is clear at first and only shows the presence of melanin after exposure to the air or when acted upon by bichromate of potash or nitric acid The pigment has then been passed in a colourless form or chromogen (melanogen) It is supposed that the melanin manufactured by the cells of the growth passes into the circulation and is changed by the tissues into melanogen before it passes into the urine, where it may unless specially tested for, entirely escape notice The presence of melanin in the urine or melanuria does not in any way depend on there being secondary growths in the kidney, for in this as in other cases it may occur without any metastatic nodules being present in these organs It appears that melanuria only occurs in cases with extensive visceral growths, especially when in the liver Dr Garrod has kindly told me that he has failed to find it in cases of local growth confined to the eye

Melanin is normally found in the eye and in the skin, it is manufactured by the activity of cells and is a proteid containing sulphur but not iron. It is not derived directly from hæmoglobin. It has been described as being found in corpuscles in the blood in cases of melanotic sarcoma A few cases have been recorded where the skin generally has become pigmented in the course of extensive melanotic sarcoma, not from the presence of cutaneous growths, but presumably from deposit of melanin on the skin conveyed there by the circulation from the neoplasm A remarkable case is described, with a coloured plate, by Dr W Legg[12] in which the pigmentation strongly suggested argyria The patient was a man aged 59 years, who had never taken silver as a drug, who had melanuria and had had an eye removed for a growth two years before His liver weighed 12½ lb and was infiltrated with melanotic sarcoma.

As to treatment, there is unfortunately little to be said, when the liver is involved any surgical interference or injection with Coley's fluid is useless Morphia to relieve pain, tapping the abdomen, and the relief of symptoms as they arise are all that can be done

To recapitulate 1 Malignant melanotic tumours though usually spoken of as sarcomatous are not so necessarily, probably a fair proportion are carcinomatous 2 Secondary melanotic growths in the liver are more often found to follow primary growths of the uveal tract and reach a larger size than when secondary to cutaneous growths 3 The hepatic growths are more frequent in men than in women in the proportion of two and a half to one. 4 The average age of patients dying with secondary melanotic hepatic growths is 48 7 years 5 Ascites occurs in more than one-fourth of the cases and jaundice in about one sixth of the collected cases 6. The urine contains melanin, though when freshly passed it may be in a colourless form (melanogen) Its detection may be of use in diagnosing a doubtful case of hepatic enlargement

[11] American Journal of Medical Sciences September 1898, vol. cxvi., p. 255.

[12] Transactions of the Pathological Society, vol. xxxv., p. 367

A NEW METHOD OF REDUCTION IN SEPARATION OF THE LOWER EPIPHYSIS OF THE FEMUR

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AND

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ON Dec 13th, 1898, we read a paper[1] before the Royal Medical and Chirurgical Society on the above subject and some valuable suggestions were made in the discussion which followed it Curiously, within a week from the reading of the paper (on Dec 19th) another case of complete separation of the lower epiphysis of the femur was admitted into the London Hospital under the care of one of us and we were able to test the value of these suggestions The main contention of our paper—the value of full flexion of the knee in effecting reduction—was illustrated in a striking manner by this case (Figs 2 and 3) Owing to the kindness of Mr Waren Tay, Mr F S Eve, and Mr Openshaw we are now able to add three other cases, two of them compound cases We venture, therefore, to bring forward as an appendix to our paper which appears in the Transactions of the Royal Medical and Chirurgical Society the record of these four cases, hoping that other surgeons may be induced to give the method of reduction by full flexion a fair trial in cases of separation of this epiphysis

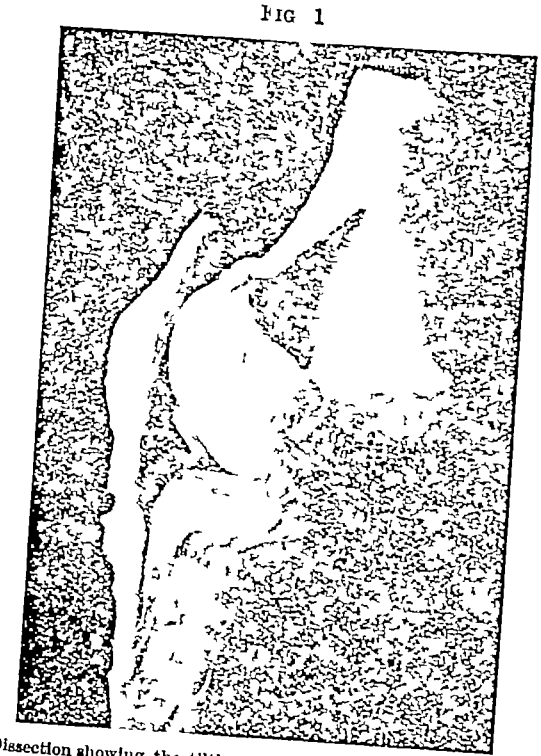
The method by which the epiphysis is displaced—Of the 16 cases of which we have personal knowledge not less than seven occurred through hanging on behind carts and the leg becoming entangled in the wheel, in four the separated epiphysis was a part of a general smash due to a lift or railway accident, in three it was due to direct violence, such as the passage of a wheel over the knee, in one it was due to placing the leg up to the knee in the gap between the shafts and the cart and then falling forward, whilst in the last case the injury was inflicted whilst playing a game well known to schoolboys, in which one boy bends down, supporting himself against a wall, whilst the others leap upon his back and endeavour to break him down. In our case whilst supporting three boys upon his back the patient was struck upon the knee by the fourth when his knee gave way bending backwards Forcible hyper-extension of the knee is thus nearly always the cause and hence if displacement occurs it is as constantly a forward one of the epiphysis

CASE 1—A boy, aged eight years, was hanging on behind a cart when his left leg became entangled in the wheel and he was swung round by it He was admitted into the London Hospital with a simple fracture of the left tibia and fibula and of the right femur, with a compound separation of the lower epiphysis of his left femur and was placed under the care of Mr F S Eve who has generously allowed us to publish

[1] LANCET Dec. 17th, 1898, p. 1630.

the case The end of the diaphysis projected at the outer side of the popliteal space through a ragged wound The wound was cleaned up and the house surgeon reduced the displacement by forcing the end of the diaphysis forward with his thumb in the wound whilst he flexed the knee and brought back the epiphysis with the other hand The leg was then placed on a straight back splint The pulse in the posterior tibial artery and in the dorsalis pedis could not be felt, but there was no hæmorrhage from the wound The boy was profoundly collapsed and no further interference was thought advisable In a day or two it was evident that the foot was becoming gangrenous and as the boy had now recovered from the shock Mr Eve amputated through the lower third of the thigh On dissection of the specimen he found that the popliteal artery and vein were torn right across, and it was found that the two inner coats had turned in occluding the end of the artery entirely and preventing hæmorrhage Fig 1 is from a photo-

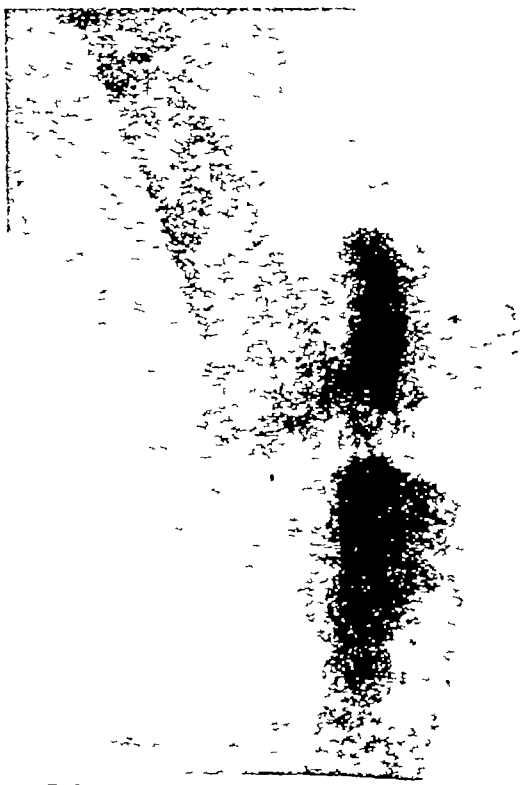
FIG 1



Dissection showing the tilting of the epiphysis and the strong periosteal band in front connecting it with the diaphysis

graph of the specimen obtained from this case by macerating it and dissecting away the muscles It will be seen that when the lower femoral epiphysis was torn off by over extension of the knee joint it was carried forward with the tibia by the pull of the crucial ligaments, whilst the end of the diaphysis was displaced backwards into the popliteal space and was found on the outer side In this position it was in dangerous proximity to the vessels and nerves Indeed, in the case from which this specimen was taken the popliteal artery and vein were torn across If unreduced the projecting end of the diaphysis prevents flexion beyond a right angle and frequently the forward inclination of the articular surfaces of the epiphysis permits of over extension The epiphysis is seen to be tilted strongly forwards, a displacement even more marked in Fig 2 and which may be explained partly by the pressure of the end of the diaphysis on its posterior edge and partly by the tension of the gastrocnemius muscle Hence the articular surface of the condyles looks forwards and may continue to do so after union has occurred (see Fig 4) The disc of cartilage has, as usual, remained with the epiphysis The fractured end of the diaphysis is convex and that of the epiphyseal cartilage is concave, hence when reduced it is not easy to displace them This specimen also very clearly shows how the epiphysis is torn off Hyper extension of the knee is checked by the tension of the posterior, the lateral, and part of the crucial ligaments Fracture at the epiphyseal line from hyper extension is largely prevented by the posterior and lateral parts of the thick cuff of periosteum which surrounds the cartilaginous disc and unites it to the diaphysis In the event of violent hyper extension this periosteum and the epiphyseal disc will yield before the powerful ligaments which unite the bones of the knee-joint The periosteum is much thickened like a cuff around the epiphyseal disc and for about half an inch on either side of it. This thick band was torn across behind and upon the outer surface at the level of the epiphysis, but in front the periosteum remained attached to the epiphysis and was stripped up for three or four inches from the femoral diaphysis in a broad ribbon It is important to notice that the periosteum was stripped only from the anterior surface of the femur It has been supposed by some that the end of the diaphysis perforated the posterior surface of the periosteum which like a cuff was stripped from all its surfaces, and this protrusion of the diaphysis through a slit in the periosteum was supposed to explain the great difficulty in reducing cases of complete separation, but it is clear in this specimen that the ribbon of periosteum attached only to the anterior surface of the epiphysis could not resist in any way its replacement The difficulty experienced in trying to replace the epiphysis by direct pressure upon it whilst traction is made in the length of the limb is, however, explained by another anatomical point brought out by this dissection The stripped up periosteum is attached to the anterior edge of the epiphysis The posterior ligament and the lateral ligament and the crucial ligament with the two heads of the gastrocnemius are attached to the posterior half of the epiphysis and behind its axis of rotation After the epiphysis is torn off, if traction be made in the line of the limb the epiphysis, being attached by periosteum in front and pulled on by ligaments and muscles behind, will rotate on its axis so as to turn its articular surfaces directly forwards, and this is a position in which no amount of direct pressure will replace the epiphysis upon the end of the diaphysis It is equally clear that if the direction of traction be gradually inclined backwards until the pull is at last at right angles to the axis of the shafts of the femur, the epiphysis will be drawn across the fractured surface of the diaphysis by the pull of the ligaments attached to its posterior half until the band of periosteum attached to its anterior edge checks this backward movement by coming in contact with the anterior surface of the femur This is our method of reduction In short, our method of reduction was devised to make the epiphysis retrace its step backwards, to apply the separated periosteum to the anterior surface of the femur, to withdraw the end of the diaphysis from the popliteal space, and when these objects have been attained so to fix the limb that the displacement could not recur The method is as follows Under complete anæsthesia an assistant makes steady but strong traction upon the tibia in the line of the limb This overcomes the upward pull of the quadriceps extensor and brings the epiphysis down to the line of the separation The operator then clasps his hands beneath the lower part of the thigh and draws it steadily upwards, gradually flexing completely the knee and hip joint whilst the assistant still keeps up the traction on the leg It will be seen that this manœuvre causes the epiphysis to move back upon the fractured surface of the diaphysis until it has reached its normal position and further movement is prevented by the periosteum coming into tight contact with the anterior surface of the femur A bandage is then applied around the thigh and ankle, fixing the knee at an angle of about 60° Complete flexion —i e, heel on buttock—we have found in our last case to be unnecessary and the wider angle is more comfortable. The limb is laid on its outer side on a pillow and an ice-bag can conveniently rest upon the front of the knee to limit the effusion The advantages of maintaining this position for a fortnight are that the quadriceps exerts tension in the length of the bone, keeping the surfaces in close apposition and squeezing out effused blood, and that the tendon of the quadriceps and the patella fit into the groove between the two condyles and prevent lateral displacement, and since the tendon of this muscle changes its direction at a right angle to be inserted into the tubercle of the tibia it prevents recurrence of the forward displacement of the epiphysis But as was suggested to us by Mr Hutchinson, sen, in the discussion on our paper at the meeting of the Royal Medical and Chirurgical Society, when it is once reduced displacement

FIG 2

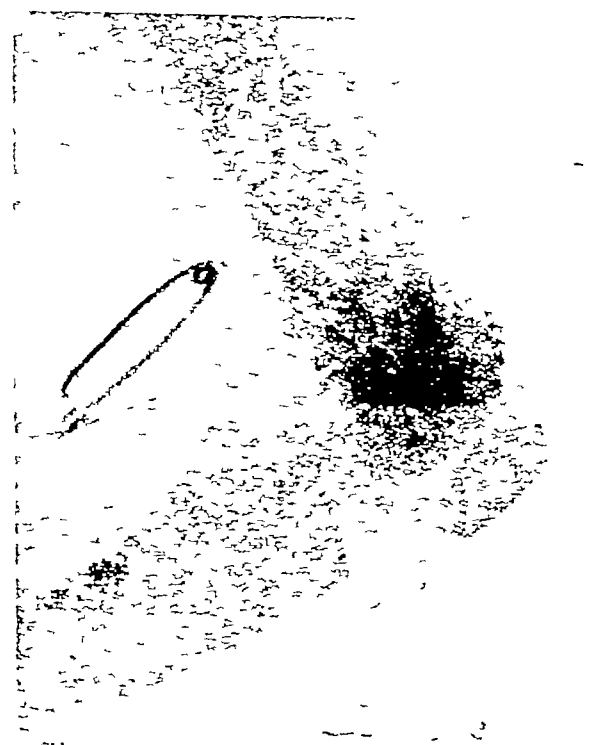


Backward projection of the diaphysis, with tilting forward of the epiphysis. It is interesting to compare this skiagram with the dissection of a case shown in Fig. 1.

has a very slight tendency to recur owing to the broad and rough surfaces brought into contact and this opinion we have found to be correct The flexed position also removes the sharp end of the diaphysis as far as possible from the popliteal space and relaxes the skin, vessels, and nerves completely The articular surfaces of the epiphysis are subcutaneous and uncovered so that their position can at any moment be observed and the dorsalis pedis and posterior tibial arteries are not concealed by any splint or apparatus. After 14 days the limb can be extended, under gas if necessary, and put up in pl in a position about 30° short of the straig ne The patient can then get about on cr es In our previous paper we recommende hat extension should be carried out slowly on a MacIntyre splint and should occupy fortnight, but as a rule we have found th caution unnecessary The plaster remains on for from a fortnight to three weeks and a little massage restores the movements of the joint

CASE 2 —A boy, aged 11 years was admitted under one of us on Dec 19th 1898 Coming as this case did only six days after the discussion at the meeting of the Royal Medical and Chirurgical Society it afforded an opportunity of settling several vexed questions raised at that meeting The history of the case was as follows The boy whilst climbing about on a stationary waggon allowed his right leg to slip into the gap between the shafts and the waggon nearly as high as his knee and he then fell forwards He was lifted out of the gap and carried to the London Hospital, where complete separation of the lower epiphysis of the femur was diagnosed The skiagram (Fig 2) was obtained before any attempt had been made at reduction On examination the following physical signs were made out The patella was prominent, riding upon the front of the condyles of the femur, and above it there was a depression The end of the diaphysis was felt in the outer side of the popliteal space and at about a quarter of an inch above the head of the tibia There was very little effusion into the knee-joint and the patient was not collapsed, although his hands were cold. The foot was rotated out We would draw attention to the extreme tilting of the epiphysis shown by this skiagram (Fig 2) An anæsthetic was then given and we endeavoured to reduce the displacement by strong traction in the extended position of the limb and pressure from before back upon the epiphysis, but without success The reason for the total failure has already been explained We then tried our method as described above of flexing the knee by drawing up the thigh whilst steady traction was maintained upon the leg The epiphysis at once slipped back into its place We then extended the leg gently until it was straight, carefully avoiding hyperextension The deformity did not recur The knee was then flexed to about 60° and fixed in that position by a domette bandage The knee was then skiagraphed again (Fig 3) It will be seen that the epiphysis had been perfectly replaced We are still, on the following grounds, of opinion that a splint is best avoided 1 A bandage is simpler 2 A splint is less comfortable 3 A splint fixes the peripheral fragment and movements of the body will then produce movement between the fractured surfaces When the knee is flexed and bandaged the fragments move together as was shown in one of our cases where the patient was delirious and very restless for several days 4 If the splint were a straight one any chance of hyperextension would shift the epiphysis again When the knee is flexed such an accident would produce movement in the knee-joint and would not disturb the fracture To this point we shall refer later On the fifth day after the accident the knee was accidentally straightened but although this made the boy cry displacement did not recur A fortnight after the accident the knee was placed in plaster-of-Paris at an

FIG 3



Skiagram from the same case as Fig 2, showing perfect replacement of the epiphysis obtained by full flexion without the use of any splint.

simple fracture The left lower femoral epiphysis was separated and the end of the diaphysis projected through the skin on the outer side of the popliteal space The house surgeon carefully cleaned the wound which was some three inches long and found the vessels and nerves intact He then reduced the epiphysis by a bimanual method. He inserted his thumb into the wound and forced the lower end of the diaphysis forward whilst he flexed the epiphysis by direct manipulation with the other hand and drew it into position. He then put the limb up on a straight splint with a foot-piece A skiagram (Fig 5) shows that whilst in this straight splint the fracture gaped behind A week later, for purposes of drainage, a Hodgen s anterior wire splint was applied and a new skiagram (Fig 6) showed that the flexed position had reduced this gaping entirely The boy was seen by us in January, 1899, five and a half months after the accident and the position and function of the knee were perfect He could walk and run and there was no limitation of movement The only thing he complained of was pain in the scar when it was pressed

Conclusions —1 That separation of the lower epiphysis of the femur is a very serious injury and is attended when compound by a high mortality 2. That in the extended position of the knee even with an anæsthetic reduction of the fragment is very difficult if not impossible. 3. That when the epiphysis is not reduced the patient is laid up for about three months and is lame for about six months whilst the end of the diaphysis frequently requires removal by operation. Shortening of the limb and secondary curves in the spine always follow 4 Nevertheless, the ultimate result in most cases that recover at all is good. The articular surface of the femur gradually grows into a useful position 5 That with the method of full flexion reduction is always easy, the treatment is short, and it is the rule to obtain perfect movement in the knee without shortening or deformity of the leg

DEATHS AFTER ABDOMINAL CŒLIOTOMY[1]

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AFTER a few introductory remarks Dr Smyly said

Amongst the causes of death after cœliotomy more or less due to abdominal conditions are (1) shock, (2) hæmorrhage, (3) ileus, (4) uræmia, (5) inanition, (6) tetanus, (7) embolism, and (8) sepsis

SHOCK

Though we are familiar with the symptoms it is difficult to define the nature of this condition. To say that it is "a profound impression made on the nerve centres and indicating extreme depression of the patient s vital forces" is rather vague, whilst the statement that "it is due to exhaustion of the medulla oblongata and spinal cord leading to a great reduction in the vital activity generally and resulting from severe irritation of the peripheral ends of the sensory and sympathetic nerves" is in the present state of our knowledge too precise, nor does it include all the cases which present a common group of symptoms but in some of which there has been no marked or prolonged nerve irritation, as, for example, those resulting from anæsthesia, hæmorrhage, or one recorded by Fritsch where an ovary was removed in five minutes and yet for hours afterwards the patient remained in an alarming condition of the profoundest shock. It appears, then, that the term "shock" applies to a group of symptoms which may be due to a variety of causes but is generally in direct proportion to the magnitude and duration of the operation, especially when associated with long exposure and manipulation of the intestines, to the amount of blood lost and the cooling of the body generally Patients already debilitated by disease, such as cancer, bleeding myomata, and granular kidneys bear operations badly as do also those with "weak hearts" Failure of the heart is one of the most prominent features in shock, and not only may this cardiac insufficiency prove directly fatal, but it may, as pointed out by Fritsch do so indirectly, for not the circulation of the blood only but also the movement of all the fluids in the body depends upon the heart's action If the heart be strong or if it soon recovers after operation the circulation of the blood and the flow of lymph continue normal, as also the currents in the peritoneal cavity where absorption takes place with extraordinary rapidity, lymph, blood, and micro-organisms are carried away through the lymphatics into the circulation, where the latter are rapidly destroyed or rendered harmless by the blood, nature's great antiseptic But for this to occur three things are necessary first, there must not be too many cocci, secondly, there must be a sound heart and an undisturbed circulation, and, thirdly, the functions of the peritoneum must be normal Where the heart is weak and continues so the flow of lymph is impeded peritoneal absorption is diminished or ceases altogether, and a fluid collects in its cavity forming a stagnant culture medium eminently suitable for the development of germs which are seldom altogether absent even after the most aseptically conducted operation There exist, then, a number of peripheral dangers which a strong heart could overcome but which with a weak heart may prove fatal Not only do the causes already mentioned cause depression of the heart s action, sluggish circulation, diminished absorption, and suppression of urine, but exposure and manipulation of the intestines is followed by derangement of the physiological functions of the peritoneum These injurious effects are observable in the congested and disordered circulation, the dilated blood vessels, and the reddened and lustreless peritoneum The muscular and mucous coats participating, peristalsis becomes weak or ceases altogether, the mucous membrane swells and ceases to absorb much flatus forms and is not expelled, and there is excessive tension in the intestines, and under such circumstances a passage of their contents into the peritoneal cavity is possible We know that white blood cells can escape and in them with them, and apart from them, doubtless intestinal bacteria also

Fritsch, who has drawn especial attention to this subject, attributes these changes to air contact and pressure changes rather than to cooling and mechanical injury, though he says they are doubtless aggravated by rough treatment of the peritoneum. Walthard of Berne, however, from a series of experiments on animals came to the conclusion that the injury was due to the drying qualities of the atmosphere though he did not deny that it might in some measure be due to its coldness causing contraction of the blood vessels and imperfect nourishment of the serosa. He therefore warned operators against drying the peritoneum and recommended the use of moist compresses wrung out of sterilised salt solution Sänger of Leipsic adopted these views and Schiffer, his assistant, reported much better results, especially the earlier return of peristaltic action and expulsion of flatus since the introduction of moist asepsis. Uhlmann, however, assistant to Zweifel in the same city, states in a recent publication that no apparent benefit has resulted from moist asepsis which is inferior to the dry in other matters, especially as a hæmostatic With these latter views I am inclined to agree and prefer the dry compresses taken directly from the can in which they have been sterilised, excepting only those which directly cover the intestines, since the latter are liable to adhere to the dry cloths

These cases present, according to Fritsch, peculiar clinical and post-mortem appearances The patient awakes from the anæsthetic with a peculiar anxious feeling embarrassed respiration, and a feeble heart She complains that the binder is too tight The intestine is paralysed, tympanitis occurs without fever, the tongue is dry, and the pulse is fast and grows faster and faster The sensorium remains clear but the weakness and anxiety increase. On the evening of the second day, or later fever sets in, the tympany increases, the pulse grows thready and the patient dies This, he contends, differs from sepsis because an acute septic condition could not develop within an hour of the operation Fever sets in early in sepsis, late in these cases, and the fact that one patient may die in this way whilst others operated upon on the same day make good recoveries proves that no serious error in asepsis has been made There are peritoneal symptoms no doubt, but not peritonitis since there is neither fever nor tenderness and these patients often recover, whereas the acutely septic invariably die Such patients become septic towards the end, but cardiac weakness is the prominent symptom

[1] Abstract of a paper read before the British Gynæcological Society on April 13th 1899.

[illegible] not because they are septic, but [illegible] they are dying The better [illegible] he believes to be due to [illegible] physiological functions which [illegible] the air, cooling, or pressure [illegible] the excellent results obtained by Lawson Tait, Bassini, Kocherle, and others are due to [illegible] operating, whereby central and peripheral [illegible] so slight that the functions of the heart and peritoneum are little interfered with

It may perhaps, be wrong to consider hæmorrhage in connexion with shock, but there can be no doubt that a large number, if not the larger number, of cases reported as deaths from shock have been due to loss of blood during or subsequent to operation Hæmorrhage after operation may be due to the slipping of a ligature which has been improperly applied, from denuded surfaces or torn adhesions, omental vessels, or from puncture of an epigastric artery when inserting the abdominal sutures The spouting of a large vessel soon gives rise to symptoms easily recognised, but a small oozing is more easily overlooked It occasionally happens that owing to heart failure the bleeding ceases altogether or appears so insignificant that the abdomen is closed, but after the patient has been put to bed and warmth and stimulants employed with the recovery of the circulation the hæmorrhage returns and its symptoms may be confounded with those of shock

Zweifel has laid particular emphasis upon the importance of absolutely checking all oozing before closing the abdomen, especially where much loss has occurred during an operation After severe hæmorrhage he says the heart works with half-filled vessels, the demands upon it are increased, and it works with great rapidity If the bleeding point has been secured and the circulation enclosed within itself it gradually refills, all the organs and tissues pouring serum into it The functions are gradually restored and the patient comes round by degrees and climbs step by step back to life But if, on the other hand, even a small hæmorrhage goes on it works against the heart's action both dynamically and reflexly When the latter improves the hæmorrhage increases, as more serum flows into the circulation the blood becomes more watery, less coagulable, and thus less adapted to the spontaneous closure of the bleeding vessels The heart working with a half filled circulation aggravated by even a small continued loss he likens to a steam-engine working a ship's propeller which lifts out of the water or to a locomotive when the wheels slip upon the rails The mechanism is imperfect, having lost its accustomed grip, it resembles a pump insufficiently supplied with water It is, in fact, an empty pumping heart which writers term "shock"

Late or secondary shock has been described, but I have never met with an example and am inclined to attribute the fatal issue in cases which I have seen recorded to secondary hæmorrhage, sepsis, or the giving way of sutured viscera, especially intestine

Preventive treatment of shock—In weak and debilitated patients with weak hearts and rapid pulse operation should be, if possible, postponed or abandoned The operation room should be heated to 75° or 80° F, prolonged exposure of the surface of the body, but especially of the intestines, should be carefully guarded against The loss of blood should be reduced to a minimum and the first symptoms of depression should be carefully watched for and actively treated

Treatment of shock.—I think we are pretty well agreed as to the main lines of treatment in these cases Hæmorrhage should at once be controlled and where the loss has been considerable sterilised salt solution should be infused either into the subcutaneous connective tissue or directly into a vein In my practice in the Rotunda Hospital I formed an unfavourable opinion of the former and abandoned it in favour of intravenous infusion, but the apparatus of Münchmeyer which I employed was imperfect compared with that used by Howard Kelly in the Johns Hopkins Hospital, by which a large quantity of solution can be more rapidly infused with a fall of six feet, and it is so strongly recommended by him that I am inclined to have recourse to it should the occasion occur In all cases of shock, whether due to loss of blood or other causes the patient should be placed in a warm bed between blankets with her head low, heat should be applied by means of hot-water bottles, and enemata of hot saline solution and stimulants should be administered The best enema in such a case is, according to Howard Kelly, one containing two ounces of brandy, 20 grains of carbonate of ammonia, and hot water or beef tea to eight ounces At the same time brandy, ether, and strychnine are administered hypodermically Opinions differ with regard to morphia, but I think its use should be restricted to cases in which pain is an important factor in the nervous depression Excepting in cases where loss of blood has been considerable saline infusion is of little value, though in some cases of protracted shock it might, as Watson Cheyne has pointed out, prevent coagulation of blood in the pulmonary vessels, a recognised cause of death under such circumstances

ILEUS

Ileus is one of the greatest disappointments which an abdominal surgeon encounters I have lost two patients from this cause during the past year, one twelve months and the other six years after operation The former occurred in England and nothing was done, the other came into hospital on the sixth day after obstruction too late to save her life Excluding cases of paralysis due to peritonitis ileus is generally due to adhesion of intestine to raw surfaces, either the abdominal wound, the stump of the pedicle, the omentum, or the surfaces denuded in enucleating tumours or breaking down adhesions, constriction of bowel by bands or from a coil of intestine slipping through a hole in the omentum, or kinking of intestine, or volvulus. Cauterised surfaces and those deprived of epithelium by abrasion have been blamed for this accident, but this has been denied by others and it is doubtful whether such injuries would cause adhesion unless deeper structures were destroyed It has also been stated that septic infection is necessary, but experiments have shown that this is not the case and that with the most rigid asepsis adhesions as a rule take place. When intestines are long exposed and much manipulated they undergo changes to which I have already alluded and adhere together Walthard found that where the peritoneum had been long exposed the superficial epithelium perished and an inflammatory demarcation formed between the dead and living tissues If two surfaces thus affected remained in quiet contact they adhered If they were not so left fibrous changes only occurred, nor would a surface so affected adhere to a normal one Sänger, as I have already mentioned, adopted these views and attributed some cases of fatal ileus to the use of dry asepsis, but Uhlman states that in a number of cases in which the abdomen had to be opened a second time in Zweifel's clinic they always found adhesions to the wound, to the stump, or to places denuded of peritoneum, but never between coils of intestine which had been exposed to the air, and I think that this will be found to coincide with the experience of most operators The early diagnosis of this complication is of the utmost importance, but unfortunately this is often impossible. Where the symptoms set in suddenly with violent paroxysmal pain in a localised position, where the peristaltic action of the intestine can be seen and felt through the abdominal wall and the patient lies prostrated between the attacks bathed in cold perspiration, where neither flatus nor fæces are expelled after energetic efforts to procure evacuation, where vomiting sets in after the second or third day and the abdomen becomes distended, an error is scarcely possible but such a stormy onset is exceptional and most of these symptoms are simulated by other conditions The obstruction may even be incomplete and the bowels may be evacuated at intervals and yet the patient may be lost In any case active measures should be at once employed to induce the bowels to act the stomach should be washed out and copious enemata should be administered with a long tube, and where the stomach can tolerate it calomel, Glauber or Epsom salts should be administered Should these measures fail the abdomen should be reopened without further loss of time The earlier the gut is freed the better is the prognosis. As to prophylactic measures Trendelenburg's position is one of the most important since the bowels are out of the way and are not disturbed, but especial care must be taken when the patient is restored to the horizontal in arranging the intestines in their normal position and seeing that they preserve their natural relation to the omentum Coating raw surfaces with collodium has been recommended and Martin of Berlin introduces a sponge soaked in sterilised oil, but most operators attach more importance to drawing down the omentum between the abdominal wound and the intestines and as far as possible covering all raw surfaces with peritoneum

THROMBOSIS

Thrombosis occurs from septic infection, or from prolonged pressure of pelvic tumours upon veins, or from sluggish circulation due to the quiet recumbent posture, or from the change in the intra abdominal pressure due to the removal of the large tumours As thrombus is a potential embolism and as it may be set free at a late period patients should be cautioned against violent efforts or straining for some time after an abdominal operation. I lost a patient from this accident during the third week after operation, she had been sitting by the fire talking to the other patients and was in the act of pulling off her boots when she suddenly was seized with a feeling of suffocation, precordial anxiety, gasping respiration, and cyanosis, and she died in a few minutes

Of tetanus I have had no personal experience

PERITONITIS.

A question of much importance is, whether peritonitis is always septic? Many would answer this question in the affirmative, but there is much to be said on the other side. There is a condition called traumatic or plastic peritonitis, it is best marked in cases where the intestines have been long exposed and much manipulated and where wide areas of adhesion have been separated In the worst forms of this affection there are vomiting, severe pain in the lower abdomen, tympanitis, tenderness on pressure, accelerated pulse, and elevation of temperature Death may result in such cases from pressure of the distended intestines on the diaphragm or from ileus The treatment of this condition recommended some years ago by Lawson Tait—namely, free purgation—is, I believe at the present time the recognised method The non infective character of many of these inflammations has been proved by Howard Kelly who, when obliged to reopen the abdomen to relieve obstructed bowel, found extensive union between adjacent peritoneal surfaces, but these cases failed to show any kind of micro-organisms in the peritoneal cavity and yet the evidences of the pouring out of a plastic lymph with the subsequent formation of adhesions were abundant

SEPTIC INFECTION

I now come to septic infection. The part played by living organisms in the production of disease has been most firmly established by "many infallible proofs" and appears to me as certain as the law of gravitation or the shape of the earth. Some who place their faith in procuring absolutely septic conditions spare no pains in attaining this object, while others regard such extreme precautions as superfluous and laugh at those who practise them as extreme ritualists, some even discarding all precautions excepting cleanliness and attributing their success to perfect technique and skill in operating For myself I must confess that I am a ritualist.

The present aseptic treatment consists essentially in perfect cleanliness and whatever others may say I have no hesitation in stating that the doctrine of cleanliness originated with, and has been based upon, the teaching and practice of Lawson Tait and Bantock. Years ago, whilst most of us were practising antiseptic methods, they in the face of bitter opposition insisted upon the importance of perfect cleanliness and pointed out the injurious effects of chemical substances in irritating and poisoning the tissues And at the present time we differ from them only in the meaning of the word *perfect*, for whilst they are satisfied with ordinary cleanliness we strive after and in a great measure obtain not only macroscopic but also microscopic cleanliness.

By perfect asepsis then, we understand that everything which comes in contact with the field of operation must be absolutely pure. "Everything includes not only the operator and his assistants his instruments and dressings, but also the air and water An operation may be carried out aseptically in any ordinary room, but this is achieved with great difficulty and risk, so that in my opinion so serious a proceeding as cœliotomy should, except under peculiar circumstances of emergency, always be performed in a special apartment so constructed that absolute cleanliness can be insured with pure air free from draughts, ample supplies of pure water and good light, and heated to about 80° F

[Dr Smyly here described the arrangement of the operating theatre at the Dublin Rotunda Hospital He continued]

Where an operation has been carried out with thorough aseptic detail and hæmorrhage has been completely arrested, drainage, one of the most important aids to success in former times, is now but rarely needed, but can never, I fear, be entirely abandoned

With regard to the after-treatment of septic cases I shall only state that I place most reliance upon alcohol Of anti-streptococcic serum I have had but little experience and that of a not very favourable kind. The reopening of the abdomen and thorough washing of the cavity I view in a pessimistic manner, though Howard Kelly speaks of it with approbation The chief difficulty is diagnosis, for when this is clear it is generally too late to interfere. In conclusion, I may epitomise these somewhat fragmentary remarks with the advice of Doyen—"Opérer vite et bien"

Dublin.

HOMICIDAL INJURIES TO THE RECTUM AND VAGINA

BY E M HAINWORTH, M D, B S, B SC LOND, F R C S ENG,

ASSISTANT SURGEON TO THE HULL ROYAL INFIRMARY AND VICTORIA HOSPITAL FOR CHILDREN HULL.

AT about 4 P M on July 22nd, 1898, an unfortunate, aged 36 years, was seen to go into a house with a man The landlady stated that the couple hired the room for two hours She noticed only the man, with whom she bargained At about 5 30 P M the man left hurriedly without paying, saying that he would be back in a few minutes, but that his "missus" wanted to rest a little longer He did not return. The landlady was doing some washing in the room beneath that occupied by the couple all this time and said that the doors of both rooms were open but that she heard no sounds, not even footsteps At about 6 30 P M she went upstairs and found that the woman was asleep, she noticed nothing peculiar about the room and left the woman alone. On this point there is some variation in the different statements made by the landlady At about 7 P.M she again went upstairs, roused the woman up, and noticed that she was ill She had some conversation with her and at her request opened her stays. In doing this she noticed that the underclothing was saturated with blood and that there was a very foul odour in the room which caused her to faint away On her recovery she procured the assistance of her niece who lived next door and finally had the woman conveyed to the Royal Infirmary at about 9 45 P M After getting the woman removed she noticed that the bed was saturated with blood, there was blood on the floor and washstand and blood stained water in the basin She said she thought that the woman had had a miscarriage On the patient's arrival at the Infirmary she was found to have sustained very extensive injuries to the rectum and vagina and she died on the same night without making any statement The landlady having got rid of the woman at once proceeded to clear up the room and wash the soiled linen According to the evidence both the man and the woman were drunk.

On July 23rd, 12 hours after death, with the assistance of Mr C V Knight, the assistant house surgeon, I made a post-mortem examination The only external marks of violence were around the genital organs There was extreme bruising for about two inches around the posterior part of the vulva and the anus The anus was dilated and the sphincter was torn, the mucous membrane was lacerated in all directions, as was also the mucous membrane of the rectum as high up as the finger could reach Per vaginam there was a deep laceration of the mucous membrane on either side from the vulva to the cervix, the vagina was not dilated and the cervix was normal Before death no injuries other than these could be detected On examining the interior of the body the peritoneal cavity was full of turbid, blood stained foul smelling fluid evidently due to a perforation of the intestine which was found to be present in the rectum The rectum on removal showed a longitudinal perforation two and a half inches long, lacerated and contused in the anterior wall opening into Douglas's pouch, the lower end of the wound was four and a half inches from the anus The mucous membrane

of the rectum was lacerated all round its circumference from the anus to the upper end of the wound—that is, for seven inches from the anal opening The omentum was adherent by an old adhesion to the cæcum and presented near the adherent point a small recent bruise On lifting it up, lying between the colon and the right kidney, which was moveable, was found a cake of soap considerably worn, three inches long by two inches broad and three quarters of an inch thick The Fallopian tubes showed old salpingitis The uterus was nulliparous, all the other organs were healthy Although the woman was said to have been very drunk, the only sign noticed was a slight smell in her breath on admission Post mortem there was no smell or other indication of alcohol or any other drug in the stomach contents The man having been arrested was tried and condemned for the murder of the patient

The first question which arose was whether these injuries could have been self inflicted The situation, extent, and severity of the wounds are all much against this theory It is conceivable that a person might by thrusting an instrument up the rectum produce a perforation of the rectum or that such might be the result of accidentally sitting down on some sharp spike, as in various recorded cases, but these theories would not account for the excessive lacerations, the injuries to the vagina and the dilatation and rupture of the sphincter Also, in these cases an instrument would have been found near the patient, while had it been the result of an accident some noise would have been heard and the patient would certainly have tried to get assistance The motive for the infliction of the injuries is very obscure It is not likely that they were the result of an attempt at an abortion, since both rectum and vagina were injured, and there is no reason from the post-mortem examination to think that the patient imagined herself pregnant Lust-murder might be suggested, but against this is the evidence that there was no noise heard no sounds of a struggle, and that the woman made no complaint of an attempt to harm her Although this part of the landlady's evidence seems almost incredible seeing the excruciating pain that the infliction of these injuries must have caused even in a drunken person, yet there was no reason for the landlady to have concealed the fact had she heard anything out of the common, and it is therefore, I think fair to assume that the patient was a consenting party to the infliction of the injuries Without doubt the piece of soap itself was incapable of causing the injuries, and it must have entered the peritoneal cavity after the perforation of the rectum had been made It is possible that it was introduced into the rectum for some immoral purpose and that the injuries resulted from the clumsy attempts made to remove it, and this seems the most reasonable explanation of the crime

Then comes the question as to the means by which the injuries were inflicted The wounds of both vagina and rectum could have been easily explained if some rough instrument had been used and the bruise on the omentum would be accounted for by assuming that such an instrument passed through the perforation of the rectum, but no instrument was found in the house, although of course it might have been cleared away by the landlady It is possible that the injuries were caused by the introduction of the hand into the rectum Introduction of the fingers alone into the rectum could not have caused the laceration of the mucous membrane seven inches from the anus, and considering the large foreign bodies mentioned in the text-books which have been found in the rectum without causing much damage it is obvious that great violence must have been used The man had been wearing a gold buckle ring with a projecting tag to the buckle, and although this might have caused laceration of the rectal mucous membrane it is somewhat doubtful if it would have inflicted the deep scores which were present in the tough vaginal mucous membrane, which it is fair to infer were inflicted by the same means as the rectal injuries, and therefore it is more probable that the injuries were inflicted by an instrument than by the hand, although no such instrument was found No incriminating evidence could be found on the man although there were a few trivi[illegible] blood stains on his clothing, but these were not more [illegible]ether could easily be accounted for However, he se[illegible] should be reports which I have heard, apart from the e[illegible] with her head in court, to be a sexual pervert [illegible]s of hot-water

Taking all the facts into consideration [illegible]ution and stimu conclusion seems to be that the injuries [illegible]t enema in such the clumsy attempt by the condemned [illegible]one containing two soap which had previously been introduced into the rectum of the woman who was a consenting party to the attempts, but that whether the injuries were caused by an instrument or by the hand it is impossible to say

Hull

A CASE OF CYSTICERCUS CELLULOSÆ

BY JOHN H GOODLIFFE, M D ABERD,
SENIOR ASSISTANT MEDICAL OFFICER, COUNTY ASYLUM DERBY WOOD NORTHAMPTON

THE occurrence of the larval stage of the tænia solium is, I believe, uncommon in the human subject in this country, and the following case may therefore be of interest

The patient in whom the cysticercus was found was an epileptic dement who had been an inmate of the asylum for more than five years at the time of her death Any previous history was unobtainable, except that she had lived a considerable time in India On admission the patient was hemiplegic, and this condition persisted up to the time of her death. She was very demented, and was in the habit of eating leaves and rubbish which she picked up She never complained of any definite symptoms whilst in the asylum Death was due to diarrhœa and exhaustion The presence of the parasite was not suspected during life At the necropsy small calcareous nodules of about the size of a lentil seed were found in the subcutaneous tissues throughout the body They could be easily felt through the skin in most parts and were quite moveable On opening the pericardium the heart was seen to be studded with calcareous bodies, varying in size from that of a pea to that of a small marble In addition to these a few cysts containing clear fluid were found, some of which had calcareous deposits in their walls whilst others had calcareous matter in the form of granules lying loose in the fluid contents The condition was best seen on the posterior aspect of the left ventricle There was no

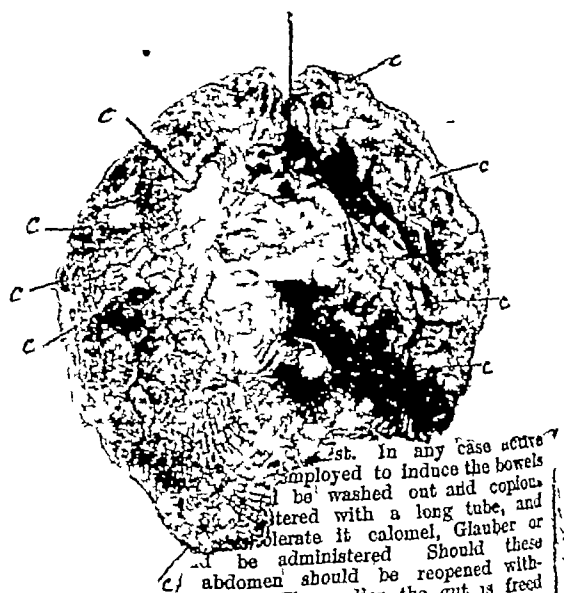


Figure showing the [illegible]

[illegible]st. In any case active [illegible]mployed to induce the bowels [illegible] be washed out and copiou[illegible]ltered with a long tube, and [illegible]olerate it calomel, Glauber or [illegible] be administered Should these [illegible] abdomen should be reopened with[illegible] of time The earlier the gut is freed [illegible]e prognosis As to prophylactic measures [illegible]g's position is one of the most important [illegible] bowels are out of the way and are not di[illegible] substa[illegible], but especial care must be taken when the patient is fr[illegible]stored to the horizontal in arranging the intestines in their normal position and seeing that they preserve their natural relation to the omentum Coating raw surfaces with collodium has been recommended and Martin of Berlin introduces a sponge soaked in sterilised oil, but most operators attach more importance to drawing down the omentum between the abdominal wound and the intestines and as far as possible covering all raw surfaces with peritoneum

were situated in or just beneath the cortex, two large ones, however, as big as walnuts, bulged into the floor of either lateral ventricle The cysts in the brain were all soft and translucent white and showed no calcareous deposits, they numbered about 40 and in no case were daughter cysts found (see figure) Microscopical examination of one of the cysts showed that the wall was finely fibrous in structure with indistinct lamination The fluid contents showed numerous granules and some spicules After a careful examination of a number of these cysts there was found an almost perfect specimen of the head of a cysticerous having four suckers and a row of hooklets This was confirmed by a further examination of a large number of other cysts, in several of which parts of a parasite of like nature were found.

In many parts of Germany this stage of the tænia is said to occur frequently in the human subject In this country it is, I believe, of rare occurrence, several cases, however, of intraocular cysticercus have been recorded by Dr Hill Griffith as having occurred in Manchester According to Osler it is rare in America In most of the cases recorded it has been a post-mortem discovery and the common sites in which it has been found are the subcutaneous tissues, the brain, and the eye—in the heart it is of much rarer occurrence

It would be extremely interesting to know if there were any connexion between the presence of the cysts and the hemiplegia and epilepsy from which the patient suffered, but owing to the absence of any reliable history and the absolute dementia of the patient herself a surmise only can be made on this point The condition was evidently one of long standing, probably of years

Berry Wood, Northampton.

A CASE OF COLLOID CARCINOMA OF THE BREAST, RECURRENCE AND DISSEMINATION

BY C E M KELLY, M D, M S LOND, F R C S ENG,
AND
W D'ESTE EMERY M D, B SC LOND

THE history of this case is that in June, 1890, the patient a married woman, 39 years of age, was admitted to University College Hospital for a discharge from the nipple of the right breast She was operated on by Mr B Hill, the greater part of the breast being removed, for a growth which was thought to be duct-papilloma (The tumour is described and illustrated in "Erichsen's Surgery," vol ii, p 781, tenth edition) There was no recurrence until December, 1894, when she noticed a small lump in the same breast, but as it was painless she did not have any thing done, although it was increasing in size, until August, 1896, when she was again admitted to University College Hospital It was then found that the scar of the first operation, extending obliquely upwards to within two inches [illegible] the right [illegible] perfect cleanliness and firmly healed At its upper end, [illegible] tumours The one on the chemical substances in irrita[illegible] was rounded and caused And at the present time we [illegible] skin, it was nodular or meaning of the word *perfect*, [illegible] little cysts which could with ordinary cleanliness we [illegible] skin could be picked measure obtain not only macroscopic [illegible] over the pectoral cleanliness

By perfect asepsis, then, we understand [illegible] freely when the which comes in contact with the field of op[illegible] situated just absolutely pure. "Everything" includes not only [illegible] smaller but and his assistants, his instruments and dressings, [illegible] as fairly the air and water An operation may be carried [illegible] aseptically in any ordinary room, but this is achieved wi[illegible] great difficulty and risk, so that in my opinion so serious a proceeding as cœliotomy should, except under peculiar circumstances of emergency, always be performed in a special apartment so constructed that absolute cleanliness can be insured, with pure air free from draughts, ample supplies of pure water and good light and heated to about 80° F

[Dr Smyly here described the arrangement of the

showing small clusters of degenerated cells At one part there was a strand of fibrous tissue surrounding large groups of spheroidal epithelium cells In July, 1897, the patient again came under notice, as a small lump had made its appearance under the scar of the previous operation, it was about as large as a pigeon's egg, quite round, elastic, and finely nodulated, the skin over it was normal in appearance and non adherent Her general health seemed fairly good, but she was complaining of pain in the right hip and down the right leg, which was considered to be rheumatic No sign of any other secondary growth could be detected, so the small tumour was again removed and it was found to be typical colloid carcinoma The last operation was trifling and she was soon well again, but now a general cachexia appeared, the pain in the right leg continued and grew worse, and a troublesome cough developed with the physical signs of bronchitis and a frothy mucoid expectoration sometimes tinged with blood, this continued till her death five months later She had much pain in the right hypochondrium and all over the right side of the abdomen, and the liver was enlarged, extending two inches below the ribs, while two or three nodules as large as a marble could be felt in it Three months before her death, after complaining very much of headache which was intense and boring in character, a depression was found in the right half of the frontal bone, it was about two inches in diameter and nearly circular in shape The edges of the depression were rough and irregular but not at all raised, while the depression itself gave the impression of the bone having disappeared and been replaced by a thin tense membrane through which the pulsations of the brain could be easily felt This depression increased slowly in size till her death, so that near the end she presented a most curious appearance—all the right side of the front of her head sank in to a depth of about one and a half inches, the depression being bounded by the upper margin of the orbit which was rough and irregular, by the middle line, the coronal suture, and the upper margin of the temporal fossa Pressure on the depression gave rise to intense pain, but there were no cerebral symptoms The skin covering it was normal in appearance and non adherent Two months before her death the sternum became affected a tumour formed at the junction of the manubrium and gladiolus, the bone evidently being extensively involved by a semi elastic new growth which extended into the cartilages of the third ribs on both sides This growth attained a large size and the patient complained much of pain there and of a feeling of pressure which it seemed to occasion in respiration She died in January, 1898

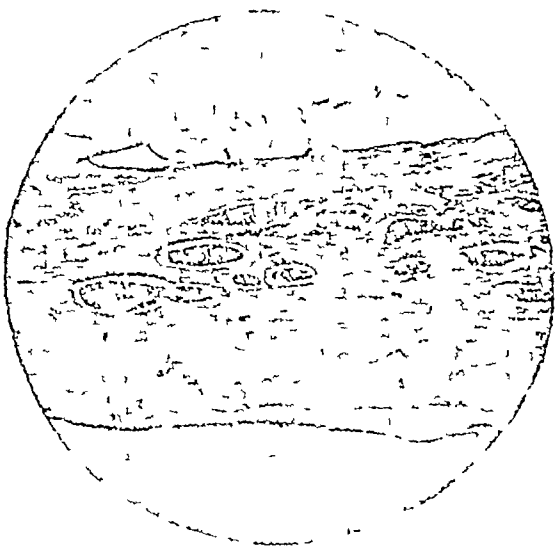
At the necropsy the sternum was found to be involved by a new growth which had replaced the manubrium and the cartilages of the second and third ribs on both sides, only a shell of bone about a quarter of an inch thick remaining in the front, the tumour was yellowish grey in colour and like soft cartilage in consistence The lungs were filled with disseminated knots of new growth, none of which were larger than a pea, which were scattered closely over all parts of the organs The lung tissue between the knots appeared normal, the tumours themselves were colloid in appearance and very firm or semi-elastic, there was no fluid in the pleura and no adhesions were found The liver was much enlarged and contained a few scattered nodules of new growth, round and white, the largest being of the size of a marble which in all respects resembled secondary deposits of scirrhus In the skull the right half of the frontal bone was replaced by an irregularly circular membrane which was firm and depressed below the level of the bone round it It was three and a half inches in diameter and one eighth of an inch thick, but this included the dura mater which was closely adherent to the membrane, so that the membrane itself was only about one twentieth of an inch in thickness The edges of the bone round the depression were infiltrated with a new growth which extended about half an inch into the bone, they were not thickened but the bone was softened and more red and vascular than normal

Histological examination of the material removed at the [illegible] tem examination showed that the growth was of [illegible] of a spheroidal celled carcinoma which had in [illegible] one colloidal degeneration while in others [illegible] ver there were masses of growth of about [illegible] These had the typical structure of an [illegible] glandular type without any colloidal [illegible] more remarkable because the centre [illegible] inct signs of degeneration In

the lungs the nodules were much smaller, but there was a considerable amount of colloid degeneration which, however, reached its greatest development in the sternum, the manubrium being practically entirely replaced by a mass on the substance, the bone being almost entirely removed In this situation each small alveolus of growth was surrounded by a thick layer of colloid The growth also extended into the body of the sternum but was less advanced in this situation

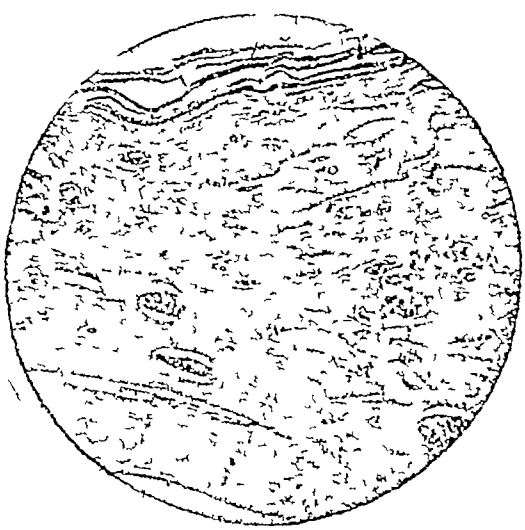
The chief interest is attached to the growth in the skull and sections were made of the edge of the aperture in this bone with the membrane near it The bone was found to be undergoing a process of rarefaction, this being most marked nearest to the edge of the gap The spaces left were filled up by young-looking fibrous tissue with elongated or spindle-

FIG 1



Microphotograph illustrating the deposit of cancer in the membranous part of the skull. × 30.

FIG 2



Illustrating the change in the skull at the edge of the deposit of cancer × 30.

shaped nuclei and in the middle of this fibrous tissue were round or oval alveoli of growth, these being most numerous where the bone ceased The cells composing them had round nuclei which were very prominent, but their protoplasm was indistinct, in many cases nothing but nuclei could be made out When these alveoli of growth were traced into the membrane they were found to become much more compact and only the nuclei were visible, all traces of protoplasm disappearing, and these nuclei, although staining well and deeply, appeared to be degenerated, while the alveoli were smaller and less numerous in proportion as they were distant from the bone There was no trace of any colloid change in any part of the bone or membrane

It would appear that this remarkable aperture in the skull was formed by a process of absorption of the bone running parallel with the deposit of alveoli of carcinoma cells and probably the new formation of fibrous tissue and that the alveoli of growth had but a short life and did not attain any large size so as to form a definite tumour, but, on the contrary, rapidly underwent degeneration so as to leave in place of the original bone merely a membrane containing a few compact masses of nuclei the remains of the original growth. This fibrous tissue was much denser than where it occupied the interstices of the bone and with the dura mater and

FIG 3

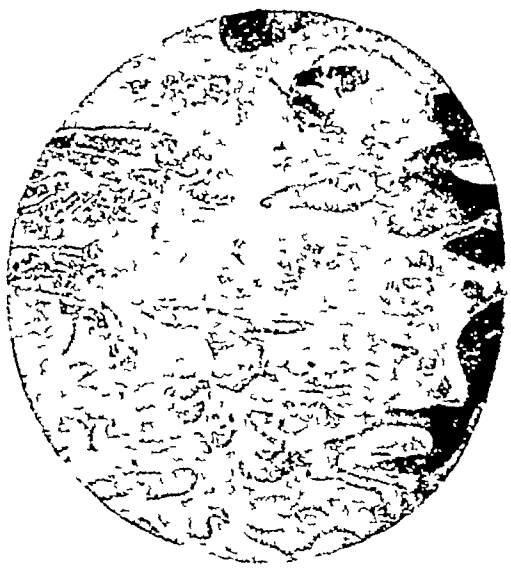
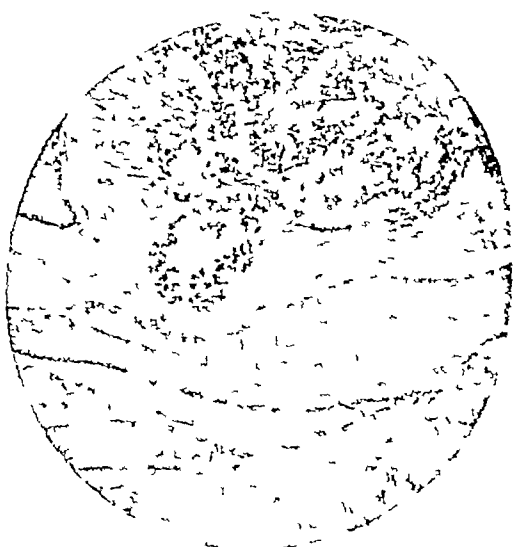


FIG 4



Figs. 3 and 4 show the absorption of the true bone and its replacement by cancerous material. × 110.

periosteum added was not more than one-eighth of an inch thick

The most interesting points in the case appear to be the curious appearance of the primary growth which so closely resembles a duct-papilloma The growth progressed at the average rate in most reported cases of this variety of cancer the secondary recurrence occurring in three and a half years and death in eight years No glandular enlargement

was found. It was curious, too, how the secondary tumours in the lung and sternum kept to the original type, while those in the liver and skull showed no trace of colloid degeneration. We have not been able to find record of any similar affection of bone like that in the skull by a new growth in which at no time was there any increase of tissue or enlargement of the bone

Our thanks are due to Dr Drew and Dr Curtis, surgical registrars of University College Hospital, and Mr R Johnson, who have given much help in the early history of the case

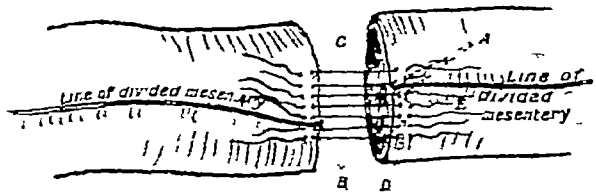
A SUGGESTION FOR TREATING THE ATTACHED BORDER IN SIMPLE SUTURE OF THE INTESTINE

By J ERNEST FRAZER, F.R.C.S Eng

THE undoubted fact that serous membranes form adhesions more rapidly and firmly to tissues which are not serous than to those which are was first brought forward in print, I believe, by the late Mr Greig Smith, but I only know of one suggestion for intestinal suture which makes use of this fact—I refer to Dr Roger's ingenious method[1] It seems to me however, that in carrying out this method there is some possible danger of interfering with the blood supply of the muscular coat, from which the serous cuff is stripped and turned back, and of that serous coat itself, and perhaps an equally advantageous result could be obtained by ordinary Lembert sutures placed in one segment of the bowel nearer to the divided edge than in the other segment My motive in this communication, however, not to criticise or advance methods of suture for the general circumference of the divided intestine, but to make a suggestion for the treatment of the attached mesenteric border of the gut, based on what is, I think, a new principle, and depending for its success on the quick adhesion between peritoneal and non peritoneal surfaces Or is it my intention to discuss the reasons why, where, and how various appliances should or should not be used instead of simple stitching without appliances, for not only have these matters been dealt with by many who speak with great authority, but they do not bear at all upon my subject The difficulty and loss of time and subsequent danger which are met with in joining the mesenteric intestinal attachments do not arise when the ordinary mechanical appliances such as the various tubes and buttons are used, but are always present when the gut is being simply stitched The cause of this drawback to simple suture is, of course the length of time which must elapse before two non serous surfaces adhere with any firmness. This is too great to be covered by the protective time afforded by the prolapse of the mucous membrane and the exudation and swelling in the line of division and stitching No matter how carefully and ingeniously the peritoneum is folded in and stitched over the triangular space at this border there must be some point—perhaps no more than a mere point—in each segment where there is no peritoneal covering, and when the mesenteric attachments are brought together these points may perhaps be opposed to one another thus leaving the danger still existing though minimised This danger would not exist if these non serous points or surfaces were opposed to serous membrane, when instead of being the weakest points in the sutured circumference, the mesenteric junctions might be expected to be amongst the strongest

The suggestion which I venture to put forward for accomplishing this object has the merit of simplicity, and, being of the nature of a principle, the further one that it can be adopted while the operator uses any form of stitch which may be captivating his fancy at the moment I intend to describe it as used with ordinary interrupted Lembert sutures and to say a few words afterwards about its use with one or two other varieties It consists essentially in opposite rotation for a little distance on the longitudinal axis, of each segment of the gut one forwards and the other backwards, so that the plane of the mesentery of one segment lies a little behind that of the other, when the two segments are fixed in this position on the tissues in the triangular intervals are opposed to the opposite peritoneal coat, to which they can adhere quickly and firmly, and when this portion of the circumference is united the remainder, with the divided mesentery, can be sutured in the usual way The accompanying diagram which is intended to show the sutures passed (the mesentery for the sake of clearness being represented as cut away near its attachment) explains what I mean. It will be observed that three stitches are shown between the separated mesenteries, but the number is of course quite optional. I will return to this point later

The blood-vessels of the gut differ in their general relations at the attached border and in the rest of the circumference The ultimate branches of the last anastomotic mesenteric loops lie at first between the muscular coat and the serous membrane which has here left the muscular coat but has not yet met its other layer to form the general mesentery For this reason the stitches which (at A and B in the diagram) pierce the peritoneum in this position must only take up the serous coat, while in the other segment (C and D) they can take some



of the muscular layer as well These ultimate arteries, instead of piercing the muscular floor of the triangular interval, may run for a little distance under the serous coat before sinking into position, so that it would perhaps be better, at least theoretically, if the middle suture (E) only involved the serous coat on both sides and the outermost sutures did the same at their mesenteric sides If thought necessary the muscular coat exposed in the triangular space could be stitched directly to the opposing peritoneum by a separate suture, this I think, should certainly be done in fat subjects and preferably in all When about to place these sutures as much mesentery as possible should be withdrawn through the incision, so that plenty of "slack" is obtained to facilitate their introduction. The segment of intestine lying near the operator's right hand is that the mesentery of which should assume the posterior plane. The first stitch is passed through the anterior layer of the right mesentery where it rises from the muscular coat in the usual Lembert manner, except that it only involves the serous coat, after this the needle is introduced into the other segment at a proper distance behind the left mesentery, involving the serous and muscular coats and leaving the suture in position The second suture is then passed in front of the first (only involving, if thought necessary, for the reasons already given, the serous coats) The third stitch is then placed through both coats of the right segment and through the rising posterior layer of the left mesentery, thus involving the serous layer only The fourth stitch includes the two coats of the right segment and the serous coat of the rising anterior layer of the left mesentery The fifth stitch is in front of this When these sutures are tied the sixth one can be placed behind the right mesentery and the suturing of the remaining circumference commenced

For the sake of simplicity I have followed the diagram in this description of the placing of the stitches which carry out the principle, but practically it will be found, especially by those who place their sutures very close together, that each rising mesenteric layer will generally take two stitches, so that with a centre stitch five sutures will be required between the mesenteries It is well, I think, to assume that a suture should not pass directly from the anterior layer of one mesentery to the posterior layer of the other, so that two inter mesenteric sutures would be the smallest number thus giving a range from two upwards the number depending on the opinion and methods of the operator, from three to five would be the usual number employed, not counting the stitches through the floor of the triangle.

The sutures can, of course, be placed in any way found most convenient by the operator, I have found no difficulty in doing this or in tying them, the time required being little if at all, longer than that required in placing an equal number of Lembert sutures in the general circumference, greater facility being given by turning the left segment

[1] Brit. Med. Jour., 1898.

upwards and backwards so that the points of future approximation come together I think, too, that some help is given by tying each stitch as it is passed, leaving the ends long for holding up the gut wall, but the stitch passing through the floor of the space is more easily placed before those immediately beside it are tied and tied afterwards The tendency is usually to pass the first stitch further behind the left mesentery than originally intended, but this is a matter of no practical importance, as it only means an addition to the number of inter mesenteric stitches

If Mansell s method be preferred the separation of the two mesenteries is easily effected by passing the first guiding suture through the walls of the segment in front of one mesentery and behind the other, the second thread is passed at the opposite point to the first and the operation proceeds as usual It must be borne in mind that the longitudinal incision is not in a line with the second stitch, but is opposite the mesentery of the segment in which it is made I have also tried the proposed method of fixing the attached borders, using the short continuous Lembert suture as recommended by Robinson This plan certainly shortens the time spent over the operation and seems to give a very good result, at least in the dead bowel As the base of the triangular space is very little under one-third of an inch across and the rising layers do not come together for nearly three quarters of an inch, the sutures involving these layers on either side are necessarily when first placed further apart than at their insertions in the other segment, but owing to the looseness of the mesenteric layers at this point they turn in and fit accurately when tied

As has been indicated, the great theoretical advantage which lies in the principle suggested is in the fact that at every point in the sutured circumference there is peritoneum on one or both sides, thus allowing no more danger at the attached borders than at any other part of the divided edges To this I venture to add the practical advantages of adaptability to any form of stitching preferred by the operator and rapidity of execution, for not only are the stitches easily applied, but the time spent in securing the mesenteric regions is at the same moment spent in suturing a corresponding length of the whole circumference

West Dulwich S E.

A CONTRIBUTION TO THE ANATOMY OF THE PERITONEUM

BY FRED J SMITH, M D OXON, F R C P LOND,
SENIOR PATHOLOGIST TO THE LONDON HOSPITAL

C MANSELL MOULLIN, F R C S ENG,
SURGEON TO THE LONDON HOSPITAL,

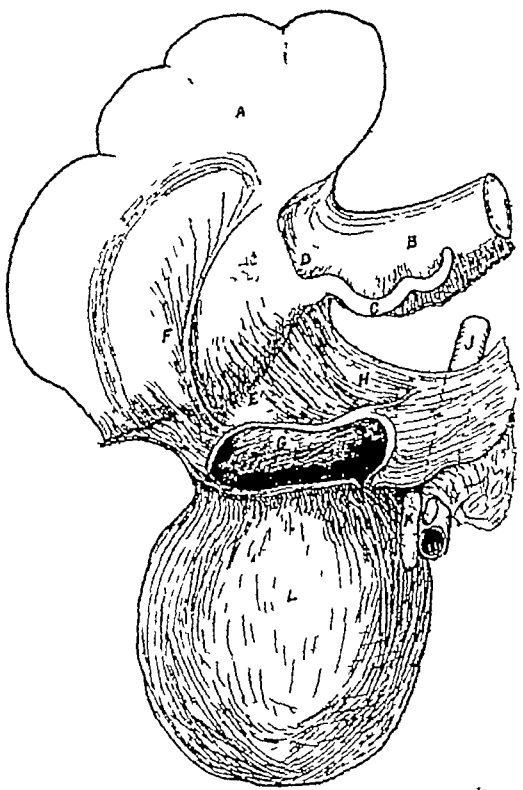
AND

ARTHUR KEITH, M D ABERD, F R C S ENG,
SENIOR DEMONSTRATOR OF ANATOMY TO THE LONDON HOSPITAL MEDICAL COLLEGE.

THAT the two following extraordinarily rare cases should come under observation within six weeks of one another in the post-mortem room of one hospital is an illustration of the manner in which pathological curiosities seem to occur in groups

CASE 1 —A man was admitted to the London Hospital on Dec 2nd, 1898, with signs of acute peritonitis Laparotomy was speedily followed by death which occurred on Dec 5th On opening the abdomen post-mortem purulent peritonitis was found with a feculent smell suggesting perforation of the gut Turning over the intestines in search of the wound Dr F J Smith became aware of a dense, hard, fibrous ring, through which a mass of small intestine seemed to have passed More careful examination led to the localisation of this ring It was situated just at the lower end of the ascending colon, nearly opposite the cæcum, an inch or so from its inner border The ring itself was very hard and definite It was about two inches in diameter with a complete and uniform circumference Before the herniated gut could be withdrawn the ring required to be freely incised, as soon as this incision was made the operator was able to withdraw an incarcerated hernia of small intestine of about the size of a large orange There were no signs of strangulation at all, but a perforation was found at the neck of the mass, due apparently to attrition against the hard unyielding ring of the sac This was the cause of the peritonitis and cleared up the case from a clinical point of view The ring and sac were cut out and are now in the museum of the London Hospital

CASE 2 —A man, aged 20 years, was admitted into the London Hospital for fracture of the spine on Jan. 11th, 1899 He was in perfect health till the time of the accident and the abdominal condition was purely incidental with no bearing or influence upon his case The patient died on the same day On opening the abdomen and lifting the omentum it at once became apparent that there was an unusual condition of things to be investigated The small intestines, instead of being loose and moveable upon one another, were found to be enclosed in a large sac with a thin peritoneal covering in front of them so that the coils could not be actually touched or individually separated The ascending colon was situated a little to the left of the mid abdominal line and had almost the whole of the small intestine lying to the right of it Investigation showed that this peculiar relationship was due to the fact that the small gut — almost the whole of it — had slipped through a hole at the lower and inner margin of the ascending colon situated in precisely the same spot as in Case 1 The margin or ring of the cavity thus formed was very different in condition in this case from that of Case 1 It was definite and defined enough but very thin, membranous, and lax, and had exerted no strangling or incarcerating influence on the contents of the sac, it was so thin and so easily continuous with the mesentery—i e, without definite change of feel or structure—as to be incapable of removal After passing through this ring the small intestine had insinuated itself upwards and downwards along the whole length of the ascending colon and cæcum and appendix in the space ordinarily termed retro-peritoneal, removing them entirely from their usual position and relations on the right of the abdominal cavity and lifting them bodily to or beyond the middle line The ring and tissues of the sac were so thin that Dr F J Smith is unable to state whether between the herniated intestine and the omentum there were one or two layers of



Specimen removed from Case 1. A, Cæcum thrown upwards. B Ileum C, Appendix. D Ileo-cæcal fossa. E, Retro-cæcal fossa. F Ascending mesocolon G, Mouth of the hernial sac. H, Peritoneum covering iliac fossa. J External iliac artery K, Lymphatic gland. L, Hernial sac which projected within the pelvis towards base of sacrum

peritoneum—i e whether it had actually forced itself through a hole in the peritoneum or had carried a layer of this structure in front of it as the sac became larger and larger

Remarks by Dr SMITH —Though the existence of a pouch of peritoneum in the situation indicated by the above description is commonly described and recognised, its development into a sac sufficiently large and definite enough to contain a true hernia is very rare indeed and I confine myself to a simple record of its occurrence Case 1 presented some features of clinical interest and I have consequently asked Mr Moullin, to whom I am indebted for permission to publish the case, to make a few remarks upon it Further references to the general question of the anatomy of the condition I have placed in the hands of Mr Keith whose authority on matters anatomical is undisputed. Mr Keith in addition to very kindly furnishing the excellent drawing of the preparation of Case 1 added the remarks which appear below

Remarks by Mr MANSELL MOULLIN —There is but little for me to add to the excellent account which has been given by Dr F J Smith of Case 1 The patient who was a rather feeble man with old standing spinal disease was admitted with the diagnosis of inflamed appendix There was a history of several previous similar attacks, each accompanied by vomiting, constipation, and pain and tenderness in the right iliac fossa On this occasion the symptoms had commenced without any very obvious reason a few days before admission There was definite dulness with a sense of resistance in the right iliac fossa and the mass could be distinctly felt per rectum After admission the symptoms subsided considerably, probably owing to the rest in bed and the careful dieting The bowels acted slightly three times after enemata The local tenderness diminished and at the end of 48 hours the patient felt so much better that he wished to leave and was with difficulty persuaded to stay Then suddenly the next day, probably at the time that perforation took place, general peritonitis set in with vomiting, abdominal tenderness and distension, and a quick, feeble pulse Laparotomy was performed the same afternoon The peritoneum was already injected and dull The ring described by Dr F J Smith was felt at once and the finger nail inserted beneath it This was instantly followed by a profuse discharge of a foul smelling brownish liquid similar to that which the patient had vomited on the last occasion No attempt was made to divide the ring or withdraw the bowel Iodoform gauze was packed around to shut off the general peritoneal cavity as far as possible and a large drainage-tube was inserted, but the patient never rallied and died in a few hours from acute septic poisoning So far as I am aware the diagnosis of retro-cæcal hernia has never been made during life In this instance it was distinctly noticed that the size of the mass in the right iliac fossa varied It diminished during the first two days and then increased again The diminution was thought to be accounted for at the time by the release of impacted fæces under the influence of the enemata, and the subsequent increase by the extension of inflammation, for the difference was not too great to be explained in this way Had it been possible to watch the case for a longer time this might have served as a clue

Remarks by Mr KEITH —Case 1 without any doubt is the very rare hernia iliaco-subfascialis The illustration explains that for it shows the position of the other two pouches in this region—the retro-cæcal and ileo-cæcal fossæ That it is such is proved positively by the external iliac artery skirting the inner wall of the sac. The hernia passes through the weak central part of the iliac fascia pushing the peritoneum in front of it It is difficult to form a definite diagnosis of the nature of the hernia in Case 2, but it is probably an example of the very rare right duodenal hernia described by Moynihan [1]

[1] THE LANCET March 4th and 11th, 1899.

BRISTOL CHILDREN'S HOSPITAL. — The fifth annual meeting of the supporters of the Convalescent Home for Children, the institution established at Weston super-Mare in connexion with the Bristol Royal Hospital for Children, was held on May 1st under the presidency of the High Sheriff of Somerset (Colonel Long) The report stated that during 1898 there were 297 children admitted The accounts showed that there was a deficit balance of £104

CASES OF GASTEROPLASTY AND PYLOROPLASTY

BY THOMAS H MORSE, F.R C S ENG

THE very interesting and instructive paper by Mr Maylard in THE LANCET of April 8th, 1899, on the subject of Exploratory Operations upon the Stomach for Obscure and Obstinate Gastric Symptoms marks another distinct advance in abdominal surgery—namely, that it should be considered justifiable to explore the inside of the stomach for diagnostic purposes Doubtless many of the cases which have hitherto only been treated medically will in future be cured by operation The two cases which follow are illustrations of this and they also show that the stomach is very tolerant of exploratory surgery

CASE 1.—An old soldier, aged 60 years, first consulted me in 1898. His history was as follows For 20 years he had suffered from pain in the stomach at intervals, it was of a griping and gnawing character and was aggravated by taking food, at the same time vomiting, which was frequent, did not relieve it Solid food caused more pain than liquid There was no special tenderness on pressure over the stomach and no tumour could be felt I was inclined to the diagnosis of cancer of the pylorus The same symptoms, however, continued without becoming any worse and in December, 1897, I discussed with him the advisability of an exploratory operation, feeling sure that the case could not be one of malignant disease In consequence he shortly afterwards entered the Norfolk and Norwich Hospital and was under the care of Dr Burton Fanning The diagnosis then made was that the stomach was bound down by adhesions and thus interfered with in its functions, possibly the result of an old inflammation around a gastric ulcer

In February, 1898, while still in the institution, the abdomen was opened and it was discovered that the stomach was constricted by adhesions rather beyond its centre so as to cause it to assume an hourglass shape The stomach was returned into the peritoneal cavity without any further treatment and the patient recovered from the operation and returned to his home His symptoms continuing he again came under my care He was thin and weak and scarcely able to leave his room, the pain was almost constant and more severe and vomiting was frequent I therefore determined to re-open the abdomen and to treat the stricture On June 18th, 1898, Mr O J Muriel gave ether and with the able assistance of Mr W Waring I opened the abdomen by an incision in the middle line from the ensiform cartilage to the umbilicus, and after dividing a considerable number of adhesions the stomach was exposed

A glance at the diagrams will show that the stomach was the seat of a stricture contracting it transversely a little beyond its centre, here its calibre was considerably narrowed by the attachment of firm adhesions by which it was drawn upwards to the under surface of the liver These adhesions were extremely tough and were evidently of long duration I then proceeded to slit up the stomach with scissors, making an incision about three inches long in its long axis and passing through the stricture So great had been the contraction that my forefinger was tightly grasped when passed through from the cardiac into the pyloric portion The organ was stuffed with gauze during the suturing to prevent extravasation of its contents Halstead's sutures of fine silk were used for the first row, followed by a second row of Lembert sutures, and finally some omental flaps were made to completely cover in the wound

The operation was in all its details precisely like pyloroplasty, the only difference being that the stomach alone was concerned in it, the pylorus being several inches beyond the wound The diagrams explain (1) the original condition and line of incision and (2) the way in which the longitudinal incision was made into a transverse one and fixed by sutures, thus bringing the organ back to its normal size and calibre

The abdomen was closed and no food was given by the mouth for 27 hours, but enemata of water with brandy and other nutrients were given By the mouth liquids were given cautiously and gradually increased as the patient recovered, until on the tenth day after the operation he took fish and on the twelfth a mutton chop, all these were digested without difficulty and without causing pain or sickness During the

the cough and rusty expectoration—in fact, all the original symptoms—reappeared. In the early morning she had 10 grains of phenacetin to relieve the headache The poultices were renewed and oxygen inhalation was again resorted to At 10 P M the temperature was 103° On the 10th at 6 A.M the temperature was 98 2°, the pulse was 72, and the respirations were 22. The poultices were discontinued On the 11th, 12th, and 13th there was no change in the condition of the patient The temperature fluctuated between 97 2° and 97 8° There was no cough, pain, dyspnœa, or expectoration The oxygen was discontinued. On the 14th, 15th, and 16th the patient continued to improve and was up for a short time during each of those days She took her ordinary diet and slept well at night

The oxygen was inhaled by means of a tube attached to a gas-bag and ending in a soft bulb which is inserted into the nostril The oxygen should not be used direct from the cylinder It is essential to use a gas-bag into which the oxygen is decanted before being inhaled because (1) the oxygen in the cylinders and issuing from them is at far too low a temperature to be used with safety for inhalation, (2) in this way the amount of extra oxygen used can best be measured, and (3) the pressure and the amount of gas inhaled per hour can thus be regulated The apparatus can be obtained from Mr Fellows, 49, Hertford-street, Mayfair

The above case is remarkable from the fact that in a patient with acute pneumonia all the symptoms disappeared, recrudesced, and finally cleared up inside eight days It may of course be suggested that these results were due to the poultices and to the two 10 grain doses of phenacetin, but I am inclined to believe they were due to the oxygen This case I venture to think, strongly emphasises the necessity of beginning soon enough and continuing long enough when we use oxygen inhalations in acute or chronic diseases of the lungs

Hertford-street W

A CASE OF EAR COUGH.

By MAYO COLLIER, M S LOND, F R C S ENG

IT is a common experience of those who have had much to do with ear affections that a patient whose ear is being manipulated will cough more or less violently while no cough is present before or after the examination This phenomenon is explained by the presence of the auricular branch of the pneumogastric nerve in and about the auditory canal This nerve is presumably the afferent conductor to the floor of the fourth ventricle of some irritation arising from an abnormal condition of the parts. In certain cases this stimulation is sufficient to set in motion the *complicated* mechanism of violent expiratory effort known as coughing There may not be the smallest source of irritation in the whole course of the pneumogastric nerve and yet irritation of its auricular branch may be sufficient to set up a cough which is equivalent to severe bronchial, pulmonary, or laryngeal irritation

On March 18th 1899 Mr Long of Haverstock hill sent to me a girl, aged 16 years, who was suffering from a most distressing cough It was peculiarly harsh and resonant and more like the bark of a large dog than a sound emanating from a human being This cough had come on suddenly three weeks before. It was incessant except for very short intervals between the attacks and abated only during sleep There were no expectoration no pain and no fever The girl had had a discharge from the right ear since her infancy Five years before she had had a fall on the head and was unconscious for four hours and was temporarily paralysed on one side. She had never had fits or convulsions There was no history of nervous affections in the family and the parents were both alive and well and strong In his letter to me Mr Long expressed an opinion that the irritation was probably in the ear or the larynx. The lungs were apparently quite free from all abnormal sounds The nose and the post nasal space were free from disease The pharynx the mouth the larynx and the trachea were healthy and rather pale. In the whole respiratory tract there was nothing to account for the cough On examining the ears the left was found to be healthy and the hearing to be normal, but the right auditory canal contained creamy pus and the hearing was very defective On cleansing the auditory passage a large bright red granular polypus was discovered which completely obscured the drum head and filled up the adjacent part of the auditory canal. The polypus was removed under cocaine and much cough occurred during the necessary manipulation of the ear The patient was sent home with an antiseptic wash and some bromide mixture The cough ceased for the next two days but returned in a modified form, being less frequent and less severe, and Mr Long again sent the patient to me The site of the polypus was very red and inflamed and much pus was pouring from the ear After cleansing the parts chromic acid (four grains to the ounce) was applied to them and the wash was continued On the next day the cough was much less and it finally entirely ceased within a week. The ear has progressed satisfactorily and is now nearly free from discharge and there has been no return of the cough

Harley-street W

A NOTE ON HÆMOPHILIA, ITS TREATMENT BY RED BONE MARROW AND BY THE CONTINUOUS ADMINISTRATION OF CHLORIDE OF CALCIUM

By E MANSEL SYMPSON, M.A., M D, B C CANTAB, M.R C.S ENG,

SURGEON TO THE LINCOLN COUNTY HOSPITAL

ALTHOUGH very little definite knowledge is obtainable as to the cause or causes of this disease—as to whether it is due, for instance, to a disproportionate amount of blood in the body (which if it exists may explain the successful depleting treatment by sulphate of soda in America), to faults in the arterial or capillary walls, or to some change in the chemical or physical constitution of the blood itself—still there has been evidence in the last few years which points to the last of these factors as the most probable cause, and that in spite of the statement which has been frequently made that no alteration could be found from normal in the quality or constitution of the blood in any way, except of course after a severe or prolonged hæmorrhage.

After the appearance of Professor A E Wright's paper[1] on increasing the coagulability of the blood by the use of a solution of chloride of calcium I administered it to patients for several days before performing severe operations such as ovariotomy wherein a considerable loss of blood might be met with, and to patients a few days before their confinements especially if there was any history of flooding at previous confinements In these cases, whether *post hoc* or *propter hoc*, there certainly was much less loss of blood than might reasonably have been expected. Also, having under my care in July, 1893, a case of hæmophilia in a little boy a little over two years old, I tried the solution of chloride of calcium on this patient and up to the present time very few weeks have passed in these six years in which he has not taken some of this medicine In the spontaneous bruises which occurred early in his life I noted myself, and my opinion was confirmed by his parents and attendants, that it was of definite value and that when it was not given more bruises and of larger size appeared than when he was regularly taking the drug Four years ago he bit his tongue right through, and the bleeding, although it was successfully stopped time after time by pressure and styptics such as collodion and compound tincture of benzoin was again and again started by the patient sucking the tongue during sleep The clots certainly became firmer and there was less effusion of blood when he was freely dosed with the solution of chloride of calcium The same remark might be made when the boy had hæmorrhage into his joints, especially into the ankles, and when he had a cut on the scalp Last year he had two attacks of hæmaturia and more good seemed to be done by keeping him on a mixture of perchloride of iron than by the chloride of calcium Assmann[2] has suggested that one cause of the hæmorrhages in hæmophilia is the increased richness of the blood in red blood corpuscles which produces over nourishment of the heart itself If this be true one ought to be careful to give nothing which would tend to increase the

[1] Brit Med Jour, July 1893.
[2] Ziemssen's Cyclopædia of Medicine v xvii p 73

richness of the blood But although it has been surprising that this little patient's heart has shown so little signs of weakness after frequent and very considerable losses of blood he has suffered from palpitation and quickening of the heart's beat in the last few hæmorrhages—the effect of nervousness, I believe There has been no rise in temperature Red bone marrow in tabloids and in the fluid form of elixir was tried with fairly satisfactory results It is supposed to increase the production of red blood corpuscles and of hæmoglobin and it certainly improved my patient's appetite and brought him round much quicker after a severe hæmorrhage than had been the case when it was not used It does not seem to have any effect on the bleeding, but it does seem to be a most useful food and stimulant to eating while bleeding is going on This was found also to be the case with a little child, also a "bleeder," under my care at the Lincoln County Hospital

Lincoln

A NOTE ON X RAYS AND COLOUR BLINDNESS

BY SYDNEY STEPHENSON, M B, F R C S EDIN,
OPHTHALMIC SURGEON TO THE EVELINA HOSPITAL AND TO THE NORTH EASTERN HOSPITAL FOR CHILDREN,
AND
DAVID WALSH, M D EDIN,
PHYSICIAN TO THE WESTERN SKIN HOSPITAL AND HONORARY SECRETARY TO THE ROENTGEN SOCIETY

FROM time to time sensational reports have been published as to the effects of the Roentgen rays upon various defective conditions of the eye It was asserted, for instance, that cases of blindness had been relieved by the aid of the focus tube In the hands of competent observers, however, the results of similar experiments have proved negative The fallacy of the original observations may have lain in the fact that they dealt with cases of hysterical blindness—that is to say, with patients who might profess themselves cured under any novel plan of treatment Or again, the blindness may have been due to opacity of the cornea or of the lens, whereby ordinary light would be excluded but no resistance would be offered by the opaque tissues to the passage of the Roentgen rays A reference to some of the early literature on the subject shows that none of the alleged cases stand the test of critical examination [1]

Professor Murani of Milan investigated five cases One of congenital and two of acquired blindness, and two of light perception without sense of form The two latter saw the glimmer of the screen and one of the two could count the shadows of the bones of the hand although unable to distinguish the form of keys, the three others saw nothing

It has lately been claimed that the retinæ of colour blind persons were acted upon strongly by the Roentgen rays In order to test this assertion four colour blind children were subjected to the rays emitted from an ordinary bianodal focus tube attached to a 12-inch coil working at nine inches The children were two of them aged eight years, one nine years, and the fourth 11 years and of good intelligence Their colour sense was defective in red green and their form-sense was normal Perception of light and form proved normal when tested by the screen enclosed in a bellows fluoroscope When the children looked steadily at the brilliantly lighted tube they showed no signs of photophobia They all recognised objects, such as keys, when held against the bare tube or against the screen The after phosphorescence of the tube was seen by all of them, as well as the greater intensity of the area in front of the anti kathodal plane Lastly, there was no sensation of light when the eyes were shut and bandaged and the children put in front of the "live' tube at the level of the eyes To sum up, there was no reason to suppose that the retinæ of these four colour blind children reacted to the focus tube in any way differently from those of folk with normal colour sense

Bentinck street, W

[1] Dr D Walsh: Roentgen Rays in Medical Work, 1897 p. 119

MONMOUTH COUNTY ASYLUM—At the meeting of the Monmouthshire County Council held on May 3rd it was decided to purchase at an approximate cost of £8000 a farm adjacent to the county asylum at Abergavenny for purposes of further development

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv Proœmium.

ST MARY'S HOSPITAL

A CASE OF TETANUS TREATED BY THE INJECTION OF ROUX'S ANTI TETANIC SERUM INTO THE SUBDURAL SPACE, RECOVERY

(Under the care of Mr H S COLLIER)

WE have reported recently several cases of tetanus in which the antitoxin has been employed, and we are able now to record two other instances in which this treatment has been resorted to The case in the Royal Hants County Hospital is a good example of a severe case with a comparatively short incubation period—namely, seven days, the disease itself lasted only about 48 hours, and although 20 cubic centimetres of antitoxin were injected, yet death ensued. In the other case the antitoxin was injected into the subdural space In April, 1898, Roux and Borrel [1] published the results of some experiments on tetanus which showed that if the toxin of tetanus has already affected any nerve cells the antitoxin is powerless against it, but if the antitoxin be injected into the substance of the brain at an early stage of the disease when the lower nervous centres only have been affected the antitoxin will render the higher centres immune to the toxin. The method was tried in Paris and recovery followed, [2] and in 20 or more cases in France this treatment has been followed. Major Semple, R A M C, has recorded a case in which this treatment was followed by recovery [3] In the case at St. Mary's Hospital which is reported below the injection was made into the subdural space instead of into the substance of the brain, this is evidently less dangerous and is well deserving of more extended trial In the present state of our knowledge all cases should be put on record For the notes of that case we are indebted to Mr C H Strator, late house surgeon

A man, aged 27 years, was admitted to St. Mary's Hospital on Feb 25th, 1899, for difficulty in swallowing and stiffness of the lower jaw 14 days previously, while chopping wood, he cut the tip of his left thumb At the time he took no notice of it, though it seems to have been rather a severe cut He continued his work as a coachman and stable hand On Feb 20th, five days before admission and nine after the injury, he noticed a good deal of pain and stiffness in his chest which he attributed to cold. The next day he had pain in the abdomen which "seemed to draw his chest down on to his stomach" On the 23rd his jaw became stiff and there was difficulty in moving the muscles of his neck and head On the 24th swallowing became difficult and opening the mouth almost impossible On the 25th, being worse, he attended at the hospital and was admitted

On admission the patient was in a very anxious state, he was quite unable to swallow solids and could only swallow liquids with very great difficulty The body was very rigid and when voluntary movements were attempted they took a very jerky form The sterno-mastoids were very rigid and stood out like bars on either side of the head Lateral movement of the head was impossible The masseters were strongly contracted, but on effort the jaw could be dropped so as to leave an interval of about half an inch between the upper and lower incisor teeth There was a depression of the angles of the mouth with contraction of the corrugator superciliii, giving the typical facies The recti abdominis were very rigid, the other abdominal muscles being less so, the pectorals and intercostals were slightly rigid The limb muscles were relaxed The knee jerks were exaggerated. While being washed he had a short, sudden, shuddering

[1] Annales de l Institut Pasteur April, 1898.
[2] La Presse Médicale June 18th 1898.
[3] Brit. Med. Jour, vol i., 1899, p. 10

attack, but there were at this time no convulsions On examining the local lesion it was seen that the left thumb had been severely cut, the tip was in a very septic state and in the discharge from it some degenerate rods were to be found on microscopical examination which might or might not have been tetanus bacilli The wound was dressed with carbolic fomentations That evening he was given three doses of 10 cubic centimetres of anti tetanic serum (Jenner Institute of Preventive Medicine) which were injected into the flanks and axilla at intervals of four hours 30 grains of chloral hydrate were given at 6 P M and 15 grains were given every four hours He passed a quiet night, sleeping well, having no convulsions, and taking a fair amount of liquid food On the 26th the pulse was good and the temperature was 99 4 F Swallowing was more easy The muscles were very rigid. Swallowing or speaking was followed by attacks of profuse perspiration At 6 P M the temperature went up to 101 6° In the evening he was restless, his respiration was shallow, spasmodic, and troublesome. The rigidity was more marked, especially in the abdomen, causing him to complain of a feeling of tightness there, the intercostals were more rigid At 11 20 P M he had a transient diaphragmatic spasm There were great rigidity and slight arching of the back, respiration ceased and he became cyanosed This condition lasted for less than a minute altogether and was followed by an hour's sleep At 12 45 A.M. on the 27th there was a second attack of a similar nature as the first but less severe, the chief feature being the rigidity of the abdomen He slept again till nearly two o clock, when he had a third attack which was more severe than the others but of the same nature, after this he was quiet till morning On the 27th swallowing was easier but still caused perspiration The masseters were tense but at times allowed the mouth to be opened for half an inch The face was drawn and almost livid The recti were very rigid, the head could not be turned at all, the back was very stiff and there was no movement between the vertebræ He passed a restless and uneasy day, took a fair amount of nourishment, and slept at intervals On the 28th the bowels were opened with an enema after which he was more comfortable During sleep the muscles were somewhat relaxed, but while he was awake they were very rigid. On March 1st the condition was practically unchanged Roux's serum, which had been sent for from Paris, arrived and it was decided to inject it into the subdural space over the cerebellum

Chloroform having been administered Mr Collier made an incision in the right occipital region, curved and about an inch and three-quarters in length, exposing the bone which was cleared of soft tissues The half inch trephine was applied and the disc of bone was removed. The dura mater was exposed and punctured with a scalpel. A blunted needle attached to an antitoxin syringe was inserted and the opening was stopped with sublimated beeswax. 10 cubic centimetres of the serum were slowly injected During this process the pulse rate went up from 70 to over 100, coming down again in a few minutes to 84 The wax was removed and the wound was sutured over the opening There was no change in the temperature or respiration during the operation Two hours later the pulse rate was 120 and the respirations were 25 The patient passed a quiet night. The chloral was continued On March 2nd the muscles of the back were distinctly less rigid and the movements of the back were more free The recti were the same as before Swallowing was more easy and the muscles of the neck were sufficiently relaxed to allow his head to be supported on pillows He was, however very restless all the morning, during the afternoon he had periodic attacks of rigidity of the flexors of the hip drawing up the thighs The temperature rose during the afternoon and at six o'clock was 104 7°, the pulse being 132 After this the temperature fell steadily and at ten o clock the next morning was 100 4 During the night swallowing became normal On the 3rd the abdominal muscles were rather more rigid than on the previous day and the limbs were quite relaxed, the sterno-mastoids and trapezii were very hard The lumbar spine was very fixed Speaking and swallowing were no longer followed by perspiration On the 4th the temperature was 99 4 and the pulse was 112, the muscles of the neck were less rigid so that he could move his head from side to side and could lie on his side with comfort The masseters were stiff and the mouth could not be opened for more than three-quarters of an inch There was no power of flexion of the spinal column, the back being raised stiffly and as in one piece, there was now no arching of the back. On the 5th the temperature was normal for the first time since the operation The condition of the muscles was unchanged except for some stiffness and cramp-like pains in the calves of the legs which followed the attempt to substitute bromide of potassium for the chloral There were two or three very mild respiratory spasms and some difficulty in respiration, all of which passed off on the administration of chloral On the 6th the trephine wound was dressed and was found to be quite healed The thumb had cleaned up and was nearly healed On the 8th the patient's general condition was very good, he could open his mouth for quite an inch. The muscles as he lay in bed were quite relaxed, but on his attempting to sit up they became very rigid, he could just get his body into an erect position with his legs over the edge of the bed, but all the muscles of his thighs stood out very sharply on his doing so After this the chloral was gradually reduced, the muscles remaining soft and movement increasing On the 16th the chloral was stopped altogether, there was no return of the symptoms On the 30th the patient was sent to a convalescent home

Remarks by Mr COLLIER —I have asked Mr Straton to add this to the list of published cases of tetanus treated with anti tetanic serum and we consider the report valuable only as a contribution to that list Considered by itself it warrants no conclusion as to the value of anti tetanic serum The case was of the subacute type and only on the night of Feb 26th was the outlook very gloomy Until the time of the subdural injection the degree of muscular spasm progressively increased in all parts After the injection an increase in the degree of the spasm was noticed only in the lower limbs and (to a small extent) in the abdominal wall When the patient was seen 18 hours after the subdural injection there was marked remission in the spasm of the pharyngeal muscles and of the posterior cervical group The abdominal muscles appeared to be as rigid as before the injection but the patient thought that the "tightness" was relieved Improvement in the muscles of deglutition and in those of the neck and face was well advanced on the fourth day after the operation The diminution of the spasm of other groups of muscles was very gradual I have to thank Mr Plimmer, the pathologist to St Mary's Hospital, for his very valuable counsel in the treatment of this case

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ROYAL HANTS COUNTY HOSPITAL, WINCHESTER

A CASE OF TETANUS TREATED BY TETANUS ANTITOXIN, DEATH

(Under the care of Mr CYRIL WAGE.)

FOR the notes of the case we are indebted to Mr John Gutch, house surgeon

A man aged 22 years, was on April 6th, 1899 admitted into the Royal Hants County Hospital with the history that on March 29th he fell from a ladder on to a spike causing a lacerated wound of his leg to the outer side of the anterior edge of the tibia. He was taken home and the wound was stitched up On April 5th there was slight stiffness of the jaw On the 6th there was spasm of the muscles of the jaw and the back of the neck with some pain and he was admitted into the hospital at 8 30 P M The temperature was then 100° F the pulse was 73, and the respirations were 23 The teeth were firmly clenched, but the patient could speak distinctly There was stiffness of the muscles of the neck, but retraction of the head was not marked The abdomen was hard and rather retracted He coughed every few minutes, the cough each time being accompanied by some spasm, during which the angles of the mouth were retracted and the teeth were tightly clenched He had been fed on milk through a gap where a tooth was missing Swallowing was said not to produce spasm The wound on the left leg was examined and the skin and subcutaneous tissues on the outside of the leg from the knee to the ankle were found to be undermined and separated from the muscles as far as the middle line behind Numerous incisions were made to let out the pus and allow drainage and the wound was thoroughly irrigated and cleansed a quantity of foul pus being washed out from beneath the undermined skin At 8 45 P M five minims of morphia were injected hypodermically and every four hours 20 grains of bromide of potassium and of chloral were administered At 10 30 P M

20 cubic centimetres of tetanus antitoxin were injected into the right flank The patient slept at intervals, moaning in his sleep and perspiring a great deal, occasional spasms were brought on by coughing He was fed at first by a spoon, but as swallowing became more difficult rectal feeding was resorted to At 1 A M on the 7th the cough was more troublesome, the patient expectorating thick tenacious phlegm streaked with blood At 1 40 A M he had a severe spasm lasting half a minute At 2 A M the temperature was 100 2°, the pulse was 110, and the respirations were 28 Three minims of morphia were injected hypodermically At 4 A M the spasms were more frequent and severe, the face being cyanosed, there was slight bleeding from the left nostril and the mouth was open during sleep At 6 A M the temperature was 101°, the pulse was 138, and the respirations were 30, he was perspiring greatly At 9 A M he was about to have a second injection of antitoxin when he became much worse, the pulse was very feeble and the breathing was difficult The cyanosis passed off and pallor came on, and the patient died at 9 45 A M The last spasm occurred about five minutes before death, it was not severe and there was no opisthotonos or arching of the wrists The temperature after death was 99 There was an inquest, but unfortunately no post mortem examination was allowed

To summarise the above case, the injury occurred on March 29th, on April 5th the onset of tetanus took place, on the 6th the patient was admitted into the hospital and tetanus antitoxin was injected, and on the 7th death supervened The case presents one or two striking points It was acute as regards onset and duration but the spasms were not at any time very marked The head was held stiff and slightly retracted, but at no time was there opisthotonos or anything approaching the "heel heel" position

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

Rheumatic Pericarditis —Albuminuria

A MEETING of this society was held on May 9th, the President, Mr BRYANT, being in the chair

Dr F J POYNTON read a paper on Rheumatic Pericarditis He said that his microscopic investigations supported the views expressed by Dr Lees and himself in two papers read before the society in June, 1898, and were a further contribution to the pathology of rheumatic dilatation A brief allusion was made to the two papers upon acute dilatation in rheumatism and chorea and to the subsequent discussion The patient from whose heart sections were made was a youth, aged 15 years, who was suffering from rheumatic pericarditis During his last illness there was clinically progressive cardiac dilatation At the necropsy the dilatation was found to be extreme although there was little valvulitis and only plastic pericarditis The microscopic investigations showed morbid changes in the vessels, interstitial tissues, and muscle of the heart-wall These changes were general and not especially localised in the neighbourhood of the inflamed pericardium Two of the clinical features were especially dwelt upon, one the extreme dilatation, the other the occurrence of Dr Rotch's sign with the absence of pericardial effusion. The following reasons were given in support of the view that the myocardial changes were concurrent and not secondary to the pericarditis (*a*) dilatation might occur without pericarditis and therefore it was unlikely that the myocardial changes were secondary to pericarditis when pericarditis was also present, (*b*) microscopic evidence pointed to the changes in the heart wall being general and not localised to the surface, and even in early pericarditis numerous foci of inflammation were found deep in the heart-wall, (*c*) the hypothesis of a rheumatic toxin probably of bacterial origin favoured the view of a simultaneous infection, when all parts of the heart were found diseased after death, and (*d*) though the post-mortem appearances of pericarditis were far more obtrusive than those due to changes in the myocardium it did not necessarily mean that they were more frequent or had a graver significance The anatomical characteristics of the pericardium probably favoured a free reaction to the rheumatic poison, the firm cardiac wall probably allowed less reaction, yet it might be much affected by the toxin Attention was directed to the marked dilatation which might occur in rheumatism with comparatively slight clinical symptoms. It was pointed out that even in acute and fatal cases of rheumatic carditis the changes in the muscle, though definite, were not extreme, whereas in other conditions—for example, "fatty heart"—the myocardial changes might be extreme and yet there be no obvious dilatation Dr Poynton suggested that the explanation lay in the complexity of such a tissue as the cardiac muscle It was liable to diverse pathological changes which probably had different interpretations Some of these changes might be extremely destructive to the vital properties of the muscle and cause death from syncope with but little dilatation, others might pervert or impair the function of the muscle, and death occur with marked dilatation The myocardial changes in rheumatism were not so gross as in cases of "fatty heart," yet the first definite clinical symptom of the latter might be sudden death, and therefore in rheumatism with less severe myocardial changes the clinical symptoms might not be urgent The reparative processes after an attack of carditis were considered with especial reference to those taking place in the myocardium Finally, allusion was made to adherent pericardium and the condition of the myocardium in those cases of morbus cordis in adults in which the symptoms far exceed the physical signs Microscopic sections were shown in support of the statements made in the paper, with explanatory sketches by Dr A W Sanders.—Dr D B LEES said that the paper afforded valuable evidence on several controverted points First of all it confirmed Dr Herringham's contention that the limits of the cardiac dulness could be made out with accuracy by percussion as verified by post-mortem observation Secondly, it confirmed the possibility of dilatation of the heart to an even greater extent than was shown to exist in living patients by percussion in the paper which was read by Dr Poynton and himself last year At the time the paper was read some scepticism was expressed whether such extensive praecordial dulness could be due to dilatation alone and was not due to pericarditis The necropsy on Dr Poynton's case revealed greater dilatation than was indicated in any of their cases and there was no pericardial effusion The importance of recognising that such dulness might be due to extension of the area occupied by the heart itself was very great, as he knew of several instances in which danger had occurred from an attempt being made to incise the pericardium in cases of dilatation under the belief that the heart was embarrassed by an effusion Thirdly, the paper showed that Rotch's sign was not conclusive of the presence of effusion. This had been maintained by Dr Lees at the discussion on heart disease in childhood at the Edinburgh meeting of the British Medical Association and it then received the support of Sir William Broadbent. The condition of the myocardium had been neglected, but there was no doubt that it might be affected independently since the changes found were situated throughout the muscle and not just under the epicardium or endocardium He believed that in many cases of mitral stenosis or pericarditis which went down hill it was the muscular condition which was responsible for the fatal result —Dr JOHN BROADBENT said that one of the cases to which Dr Poynton had briefly referred seemed thoroughly to bear out his contention as to the independent development of myocarditis The patient had recurrent rheumatism and died during the second attack, when there were found recent interstitial change and also fibroid patches in the muscular substance probably dating from the previous attack of rheumatism Assuming that the changes were due to toxins it was curious that in cases of diphtheria or enteric fever where dilatation of the heart occurred interstitial changes were not, he thought, met with and he suggested that this might be due to the toxins being produced in the heart itself in the case of rheumatism —Dr T J MACLAGAN agreed as to the important part which myocarditis played He thought that the possibility of there being a similar change in the voluntary muscles ought not to be overlooked and he thought that the abundant formation of lactic acid in rheumatism pointed in this direction —Dr T BARLOW mentioned the case of a girl, 15 years of age, who was under treatment for acute rheumatism She developed pleural effusion which was tapped, giving her much relief She died, however, and the heart was found to be greatly dilated,

although there was neither endocarditis nor pericarditis A microscopic examination by Dr Charlewood Turner showed that there was extensive myocarditis He quite agreed that the muscular change was not limited to the cardiac muscle, the prostration in cases of acute rheumatism being comparable in some cases to that in scurvy The atrophy of the interossei and muscles of the forearm which was so striking in cases of acute rheumatism even without neuritis of the ulnar nerve were best explained on the ground of myositis — Dr POYNTON, in reply, said he thought that there were two processes, toxic and reactive The loss of muscular tone which occurred in diphtheria as well as in rheumatism was a toxic process, while the interstitial changes which occurred later in rheumatic cases were part of the process of reaction. He was already investigating the state of the voluntary muscles in acute rheumatism

Dr ARCHIBALD GARROD contributed a paper on Alkaptonuria. He observed that although a very rare anomaly alkaptonuria possessed much interest both in its physiological and clinical aspects The urine of alkaptonuric individuals darkened rapidly after it was passed, acquiring a deep brown colour The change was much more marked on the addition of an alkali and was attended by absorption of oxygen The urine reduced Fehling's solution with the aid of heat and ammoniacal silver nitrate solution in the cold It was optically inactive and the reducing substance did not ferment Fabrics moistened with the urine became deeply stained on exposure to the air The reducing action of the urine might cause the condition to be mistaken for glycosuria. The history of alkaptonuria dated from an observation of Bödeker in 1859, but a case almost certainly of this nature was read to the Royal Medical and Chirurgical Society by Dr A Marcet in 1822 Dr Garrod had only been able to find 24 adequately recorded examples of alkaptonuria which were embodied in a table together with seven additional cases hitherto unrecorded For the notes of five of these he was indebted to Dr Pavy, as also for some specimens of urine Alkaptonuria was usually congenital and life-long and was apparently without injurious influence upon the health of the patient The great majority of the patients were males, of the congenital cases a considerable number had occurred in brothers and sisters In a few instances temporary alkaptonuria had been observed. Bödeker isolated from the urine of his patient a substance which he called "alkapton" In some later cases pyro-catechin and in some others proto-catechuic acid were thought to be the abnormal constituents present Kirk isolated and analysed a crystalline acid which he called uroleucic acid Marshall gave the name of glycosuric acid to a substance isolated by him and Wolkow and Baumann obtained from the urine of an alkaptonuric patient homogentisinic or hydroquinone acetic acid, which substance had been met with in all subsequent cases in which it had been sought for Huppert re examined Kirk's material and found that in addition to uroleucic acid homogentisinic acid was present in large amount. Uroleucic acid had not hitherto been detected in any recorded cases except those of Kirk, but as a rule its presence did not appear to have been excluded. Observations by Wolkow and Baumann seemed to show conclusively that tyrosin was the parent substance of homogentisinic acid in the organism and they regarded it as probable that the latter was formed in the intestine by the action of a special micro-organism Later observations, although they did not directly negative this suggestion, had failed to lend it any support It was at one time supposed that alkapton urines were extremely deficient in uric acid, but later observations did not support this observation Dr Garrod had had opportunities of examining the urine of five alkaptonuric individuals Case 1 was that of an infant kindly transferred to his care by Dr Voelcker The staining of the napkins was noticed on the day following birth No other cases had occurred in the family The patient was now 15 months old and was in good health The fæces were found, as in all previous cases in which they had been examined, to be free from homogentisinic acid. A bacteriological examination made by Dr Drysdale led to no conclusive results The urine had all the properties of alkaptonuria and the child was brought to the hospital on account of the peculiar colour of the urine Owing to the youth of the patient no systematic analysis of the daily excretion could be as yet carried out but uric acid was found to be present in undiminished quantity Homogentisinic acid was abundantly present in the urine and was extracted in the form of its lead salt by Wolkow and Baumann's process as well as by a simpler process recently described by Dr Garrod Analytical figures were given showing that the lead salt obtained was lead homogentisinate and from it the free acid was prepared and its melting point determined A further search for the uroleucic acid of Kirk was attended with a negative result. Case 2 —The patient was a school boy, aged 14 years, whose sister was also alkaptonuric Her case was described by Dr Armstrong and Dr Walter Smith in 1882 The boy was a patient under the care of Dr C E Baker From the urine of this patient also homogentisinic acid was extracted by both the processes above referred to Here also the search for uroleucic acid was attended with a negative result Cases 3, 4, and 5 —The urines of these patients who were two brothers and a sister, were kindly given to Dr Garrod by Dr Pavy The specimens were small in bulk and had been kept no less than eight years It was, however, still possible to demonstrate the presence of homogentisinic acid in two of the specimens The bulk of the third specimen was unfortunately lost, and the result was therefore inconclusive as to the presence of homogentisinic acid, although there was good reason to believe that this substance was present in this case also The observations described in this paper tended to support the view that the presence of homogentisinic acid in the urine was the essential feature of alkaptonuria and that uroleucic acid, when present, was of the nature of a by-product of the abnormal metabolic process A complete bibliography of the literature of alkaptonuria was appended to the paper — Dr F PAVY said that he had been fortunate enough to meet with five of these cases and he had been very glad to hand them over to Dr Garrod whose paper, he thought, would be a classical one It was curious that the passage of this substance did not affect the general health of the patients and did not even affect the colour of the urine at the time it was passed. A somewhat parallel condition as regards its innocuousness was cystinuria, in which the patients suffered no inconvenience unless a concretion of crystals formed in the bladder There was no evidence of a microbic origin in either case It was of great importance that the condition should be recognised, as the reducing action of the urine on Fehling's solution might lead a life insurance examiner to think that sugar was present —Dr R MAGUIRE said that he had only come across one case of this kind, but there were many other forms of alkaptonuria in which the urine turned dark when it became alkaline One example was carboluria, in which the urine passed was not dark till it became alkaline. He mentioned the case of a man with cystitis and pyonephrosis whose kidney was incised and a fistula formed in the loin The man developed carboluria and while the acid urine passed through the fistula was normal in tint, the alkaline urine passed by the urethra was dark. He asked whether Dr Garrod could tell him the composition of the pigments Dark urine was also seen in cases of poisoning by nitrobenzol and antifebrin which contained the benzine group and the amido group respectively —Dr F G HOPKINS said that he had had to examine 3000 specimens of morbid urine and only one had shown definite signs of alkaptonuria, although in two others there was a vague darkening which remained unexplained — Dr GARROD, in reply, said that he did not know the nature of the pigments He thought that the name "alkaptonuria" should be restricted to those specimens which not only turned dark when alkaline but also reduced Fehling's solution

MEDICAL SOCIETY OF LONDON

Annual General Meeting —Encysted Vesical Calculi — Resection of the Large Intestine —Sarcoma

THE annual meeting of this society was held on May 8th, the President, Mr EDMUND OWEN, being in the chair

The report of the Council was read and adopted It showed that the society was in a flourishing condition It referred with great regret to the resignation of the honorary librarian, Dr Allchin after 17 years' service The ballot was taken for the President and officers for the session 1899-1900 and the following were elected —President Dr Frederick T Roberts Vice Presidents Dr J Mitchell Bruce, Mr George R Turner, Dr Samuel West, and Mr Howard Barrett Treasurer Mr David H Goodsall

Librarian Dr Sidney Martin Honorary secretaries Dr James Calvert and Mr Frederick C Wallis Honorary Secretary for Foreign Correspondence Dr William Ewart Council Dr William H Allchin, Mr William H Baker, Mr William H Battle, Mr Stanley Boyd, Dr Henry A Caley, Dr Walter S Colman, Mr J W Dennis Dallaway, Mr Alban H G Doran, Dr J Kingston Fowler, Dr George W Isaac, Dr Robert Maguire, Mr John H Morgan, Dr J Baldwin Nias, Dr Humphry D Rolleston, Mr Morton Smale, Dr Frederick J Smith, Dr Herbert R Spencer, Mr Charters J Symonds, Dr Arthur F. Voelcker, and Dr Edward G Younger

Subsequently an ordinary meeting was held, Mr OWEN being in the chair

Mr BRUCE CLARKE read a paper on Encysted Vesical Calculi, with an account of 27 cases After referring to an earlier paper in which six similar cases had been described by him in St Bartholomew's Hospital Reports for 1891, vol xxvii, Mr Bruce Clarke pointed out that in these cases where the stone was fixed to the bladder wall the usual symptoms of stone were absent Hæmaturia and pain rarely occurred and cystitis was usually the only symptom with which the cases were associated At an early stage the symptoms they presented were assumed to be due to some other cause and the stone was often only detected when the bladder was opened In half the cases which were described in the paper this was the case The exact position of the stone in the bladder wall varied considerably Some were embedded in the prostate and some lay loose in cysts in other parts of the bladder, but these cysts were usually found near the base One instance was recorded where the patient was castrated in consequence of an enlarged prostate and after death a stone was found embedded in its substance In others the bladder wall was so thinned where the stone lay that inflammation and in some instances suppuration of the surrounding parts occurred Mr Bruce Clarke showed that most of these cases occurred in individuals between 60 and 70 years of age and pointed out the need for exploring doubtful cases of cystitis which did not yield to ordinary methods of treatment —The PRESIDENT said that Mr Bruce Clarke s experience must be unique as these cases were very rare He was interested to hear of the frequency with which the cystoscope gave negative results He fully agreed that in obscure cases of cystitis the correct plan was to make a suprapubic exploration and remarked that the use of a vaginal speculum was often of great assistance —Mr SWINFORD EDWARDS said that he had only met with two cases out of 200 of vesical calculus The enlarged prostate often interfered with the introduction of the cystoscope, but when it could be introduced he would expect it to be of value Attempts to catch the end of an encysted stone and crush it *in situ* or drag it into the bladder were as a rule inadvisable, it being best to reach them through a suprapubic opening In one case, however, he was able to dislodge a stone which was encysted above the pubes and crush it when it had been displaced into the bladder — Mr BUCKSTON BROWNE said that calculi lying in the post-prostatic pouch were not to be confounded with true encysted calculi, those actually embedded in the walls of the bladder, the surgical treatment of the two classes being entirely different —Mr P J FREYER said that he had only met with 20 cases of this kind out of 2000 cases of vesical calculus — Mr BRUCE CLARKE, in reply, said that the cystoscope was of use in some of the cases, but in many the stone was so completely embedded that it could hardly be seen or felt when the bladder was opened He agreed that it would be best to crush the stone *in situ* when the opening was large enough In all of his cases the stone was actually embedded and not lying in the post prostatic pouch

Mr FREDERIC EVE read a paper on Two cases of Resection of the Large Intestine with Recovery Case 1 was that of a man, aged 46 years, with a large left scrotal hernia which had been strangulated for three days The sac contained a knuckle of the transverse colon which was gangrenous A glass tube was inserted into the intestine and the latter was attached to the wound Five weeks later the intestine forming the artificial anus was brought out of the abdomen after opening the peritoneum, resected, and sutured The intestine was returned and the abdomen closed Primary union and recovery without complication ensued Case 2 was an example of carcinoma of the descending colon, for which Mr Eve was indebted to Dr F J Smith A woman, aged 47 years, had suffered with pain in the abdomen, vomiting, constipation, and occasional melæna for seven months A tumour in the left loin had been noticed for some months. The constipation culminated in an attack of obstruction during which the first operation was performed This consisted in bringing out the tumour with several inches of healthy bowel and fixing the bowel to the parietes. The bowel was drained by the insertion of a glass tube. 10 days later the protruding portion of the bowel was removed and the mesenteric edges of the divided ends were brought together with sutures After allowing an interval of a month for the inflammatory effusion around the wound to become absorbed an incision was made around the artificial anus down to the peritoneum The latter was not opened but was separated from the parietes for about two inches all round the protruding bowel The free ends of the intestine were refreshed and brought together with Lembert's sutures. The parietes were then closed over the bowel The wound was completely healed three weeks after the operation At the present time the patient appeared perfectly well and had suffered no inconvenience Mr Eve was of opinion that in these and similar cases the bowel should be drained even although only moderate symptoms of obstruction existed. He thought that for the large intestine at any rate suture was safer than the use of Murphy's button except when rapidity was necessary Case 2 was published especially to draw attention to the merits of extra peritoneal resection and suture for artificial anus as the safest method It was introduced by the late Mr Greig Smith This operation was attempted in Case 1 but had to be abandoned owing to the extreme thinness and friability of the peritoneum. This was probably due to stretching of the membrane from the presence of a large hernial sac in its neighbourhood.— Mr W H BATTLE agreed that it was inadvisable to resect the bowel at the same time that obstruction was relieved He remarked that it was not always possible to get the affected portion of the bowel to the surface, especially if there was much distension He used lateral in preference to end-to-end anastomosis and preferred careful suturing to the use of bobbins —Mr F C WALLIS agreed that suturing was better than the use of Murphy's button or bobbins in the case of the large intestine but thought that in the case of the small intestine they were sometimes of use —Mr EVE, in reply, said that in resecting the growth he purposely cut away more of the mesenteric side of the gut in order to lessen the formation of a spur

Mr PEARCE GOULD brought up the report of the committee, consisting of Mr Marmaduke Sheild, Mr Stanley Boyd, and himself, on the case of supposed cure of Sarcoma by Coley's Fluid reported by Mr Battle After considering the clinical record and Mr Shattock's report and examining some sections they were of opinion that the pathological appearances were not conclusive of sarcoma and that the possibility of the lesion being a syphilitic one was not excluded

OBSTETRICAL SOCIETY OF LONDON

Fibroid Tumours —Exhibition of Specimens

A MEETING of this society was held at 20, Hanover square, W, on May 3rd, Mr ALBAN DORAN, President, being in the chair

The PRESIDENT read a paper on Fibroid of the Broad Ligament weighing 44½ lb (20 kilogrammes) removed by enucleation, recovery, with table and analysis of 39 cases The patient was 28 years of age and her last confinement was six years before operation Shortly afterwards a tumour developed in the left iliac fossa, three years later it became impacted in the pelvis Dr Ward Cousins succeeded in pushing it into the abdominal cavity, this gave great relief, but the tumour grew rapidly and albuminuria and anasarca set in The catamenia remained normal throughout The tumour grew in such a manner that the lower ribs were not stretched out but pushed back behind it In order to spare as much blood as possible the ovarian and round ligament vessels were ligatured proximally and distally, the capsule was divided between the ligatures which were then tightened, and lastly the incisions in the capsule were united, so that after its complete division horizontally and the securing of the cervix uteri the tumour was enucleated without loss of blood The cut edge of the capsule was drawn together with a purse-string suture its cavity being packed with iodoform gauze The serrenœud was left on the cervix as it answered well its purpose and lay separated by the capsule

and its packing from the peritoneal cavity Though very weak for a few days the patient did well The packing was removed in 48 hours, the deep cavity soon shrunk up Mr Doran, after reviewing earlier tables prepared by Sänger, Bayard Holmes, and Lang, brought forward a table of 39 cases of "fibroid" (fibroma and myoma) of the broad ligament with an analysis In no less than six the patient was under 30 years of age and in just as many over 50 years of age Menstruation seemed unaffected nor was flooding ever noted. In two cases, including Mr Doran's, there were renal symptoms from pressure on one ureter All recovered. When the tumour was small and limited to the side from which it originated it might sometimes be safely removed with its ovary and tube, the hypertrophied connective tissue uniting it to the uterus serving as a pedicle When the tumour was large the removal of both appendages and amputation of the uterus was usually unavoidable Retro-peritoneal hysterectomy was probably the best procedure, if practicable. The chief duty of the surgeon in enucleation of broad ligament tumours was to avoid loss of blood. The patients were nearly always sickly and anæmic, although flooding did not occur in this class of tumour, and they bore hæmorrhage badly Mr Doran urged the method which he adopted as the best way of avoiding loss of blood Pressure forceps on the distal side were untrustworthy

Dr HUBERT ROBERTS read notes of a case of a large Retro-peritoneal Fibroid undergoing Suppuration The patient was a married multipara, aged 50 years There was a history of an abdominal tumour for over 13 years Menstruation ceased eight months ago since which date the patient had lost flesh and the tumour had increased in size A large tumour (which, including the pus weighed 38 lb) reached up to the ensiform cartilage The fundus uteri could be felt just above the symphysis. The cervix could not be reached per vaginam. At the operation (performed by Mr Meredith) adhesions were found between the tumour and the parietes and omentum The tumour contained 13 pints of odourless pus, it was removed by enucleation together with the body of the uterus and the pedicle was treated extra peritoneally The patient 19 days later was making an excellent recovery The tumour grew entirely in the broad ligament and had only slight adhesion to the uterus —Dr EWEN MACLEAN referred to a specimen of broad ligament myoma which he had removed and exhibited to the society The patient was 45 years of age and the menstrual function had been in all respects normal Since the birth of her only child, some seven years previously she had been conscious of a pelvic swelling and of "bearing down" During the last two years the tumour had increased much in size A broad ligament myoma, weighing 14 lb , was enucleated from the left side and its peduncular attachment to the upper part of the left side of the uterus was ligatured and divided. Hæmorrhage due to the rapid retraction of the pedicle necessitated the removal of the uterus and its appendages The patient made a good recovery —Mr BUTLER SMYTHE asked what was the position of the uterus in the case reported by Dr Roberts In all the cases of intra-ligamentous tumours which had come under his own observation the uterus was pushed or drawn up high in front of the tumour and in many cases that organ could be felt through the abdominal wall —The PRESIDENT in reply, mentioned three more cases of fibroid of the broad ligament.—Dr ROBERTS, in reply, said that in the case reported the uterus was quite small and displaced forwards and upwards close behind the symphysis He regretted that none of the bellows could throw further light on the suppurative processes in degenerating fibroids

The following specimens were shown —

Dr PURSLOW (Birmingham) (1) A Fœtus enclosed in the Amniotic Sac only and (2) a Cyst of the Broad Ligament

Dr GALABIN Ruptured Tubal Pregnancy

Dr ADDINSELL Ruptured Tubal Pregnancy

Mr TARGETT Two cases of Bilateral Tuberculous Pyosalpinx

HARVEIAN SOCIETY OF LONDON

Arthrotomy for the Relief of Pain

A MEETING of this society was held on May 4th, the Vice-President Mr PEYTON BEALE, being in the chair

Mr LOCKWOOD read a paper on Arthrotomy for the Relief of Pain, Removal of Synovial Fringes, Loose Bodies, and Fibro-cartilages The first part of Mr Lockwood's communication referred to four cases in which the wrist-joint had been opened for the relief of pain Two of these occurred in women and were possibly pyæmic The joint was opened by longitudinal incision betwixt the extensor tendons and was drained for some days after which the wound completely healed The relief from pain was immediate and permanent The third case occurred in a man and was proved by histological examination to be tuberculous It was treated in a manner similar to the two former cases Pain was immediately and permanently relieved and the disease was arrested The fourth case occurred in a woman The inferior radio-ulnar articulation was inflamed and had been for four years and was the seat of extreme pain It was opened by dorsal incision and as the cartilage covering of the lower end of the ulna was eroded and the bone inflamed the head was removed The incision was closed without drainage, pain ceased, and the ultimate recovery was perfect It was pointed out that in all these cases the operation was performed for the relief of pain. Mr Lockwood had often performed arthrotomy in cases of acute septic arthritis in which pain had been present. Obviously, under these circumstances, the operation was not performed for the relief of pain but to give exit for septic or purulent fluid Arthrotomy for the removal of inflamed and elongated synovial fringes was next referred to The case of a married woman was described at length For six years she had had repeated attacks of synovitis Latterly the swelling and inflammation of the knee-joint had become almost continuous The symptoms were very like those which were caused by the presence of a loose body within the joint. None could be detected and the joint was opened. The absence of a loose body was confirmed, but the whole of the synovial fringes of the joint were observed to be exceedingly long and inflamed It seemed likely that some of them might have got nipped betwixt the articular surfaces They were all removed For this purpose the ligamentum patellæ was divided A speedy recovery ensued Six months after the operation she said that the knee was better than it had been for years She was able to walk about and perform her household duties The movements of the joint were good and painless It contained no fluid Mr Lockwood thought that the membrane was still a little swollen In connexion with this case the best manner of opening the knee-joint for the total removal of fringes was discussed Another case of a similar character was likewise described Next some cases of arthrotomy in chronic osteo-arthritis were described These were undertaken because the chrondrified and ossified synovial fringes got betwixt the articular surfaces either by having become detached or because they had very long pedicles One of these patients was in her seventieth year Nevertheless, three weeks after four loose bodies had been removed from the joint she was walking about In a second case in addition to pedunculated cartilaginous fringes a pedunculated fatty growth of the synovial membrane was taken away In yet another case of osteo-arthritis pedunculated fringe was removed The joint ceased to lock but the operation was followed by a certain degree of stiffness due to the progress of the osteo-arthritis. The avoidance of this complication was discussed. Finally cases of excision of the internal semilunar fibro-cartilage were mentioned One was described in which the history four years after the operation showed that the result had been perfect In a second case of removal of the internal semilunar fibro-cartilage the history was brought down to three years after the operation With the exception of the scar the knee joint was normal The patient led a most active life and considered the joint to be as good as the other, quite perfect in spite of the absence of the fibro-cartilage. The third case was peculiar, having occurred in a woman In this again the removal of the fibro cartilage whilst curing the locking of the joint was attended with no other appreciable effect

Mr HOWARD MARSH insisted upon the importance of the subjects raised in the paper In regard to pain as a symptom of many joint affections he pointed out the important part played by tension and agreed that in many instances this was best relieved by free incision into the joint Transverse division of the patella was perhaps the most satisfactory method of freely exposing the interior of the knee Mr Marsh had operated in about 40 cases for the removal of the internal semilunar fibro-cartilage, in all the result had been satisfactory and in none had any impairment in the function of the joint been recognisable In a few

instances the affection had been met with in women and twice in children under 10 years of age

Mr HERBERT ALLINGHAM had operated in 50 cases for one or another of the various conditions mentioned in Mr Lockwood's paper The series included 18 cases in which the internal semilunar cartilage was excised and 13 in which the dislocated cartilage was sutured in position, and 11 cases in which loose cartilages and three in which osteophytes were removed In one case of chronic rheumatism the joint was drained and in three cases although nothing definite was found to explain the symptoms the latter were relieved by arthrotomy In Mr Allingham's opinion the most satisfactory view of the interior of the knee joint was obtained by a longitudinal division of the patella through an incision beginning at the upper part of the joint and continued downwards into the ligamentum patellæ

Mr W J WALSHAM had during the last 18 months also operated upon about 20 cases of the kind under discussion without any mishap He insisted upon the importance of careful preparation of the patient for such operation and thought it very advisable to keep the knee fixed on a splint for a week if possible beforehand He strongly advocated transverse division of the patella as the best means of freely exposing the knee joint Mr Walsham agreed that the symptoms of a dislocated semilunar cartilage were often not such as were described in the text-books and might consist of little more than a crack or snap during the movements of the joint In the treatment of such cases after operation he advised that movement should be commenced at the end of a fortnight and that the patient should be allowed to walk at the end of three weeks

Mr JACKSON CLARKE referred to the case of an athletic man who had had pain in a knee-joint for four years originating in a sprain received at golf The symptoms were so severe that at first it seemed likely that the joint would require to be opened Mr Clarke, however, first tried the effect of a support which prevented lateral and rotatory movement at the knee This measure proved successful and enabled the patient to play football, polo, and other vigorous games At the end of a year the apparatus was left off and the patient had no further trouble

Mr RAYMOND JOHNSON referred to a case in which suppuration in the knee joint followed an operation for the removal of a semilunar cartilage He at once drained the joint by free lateral incision and recovery followed with a very fair amount of movement He believed the infection of the joint took place from the skin and was in part accounted for by the fact that at the time of the operation there was still a good deal of fluid in the joint It was certainly much safer in these cases to delay operation until the attack of synovitis had subsided A question was asked as to the probable nature of some cases of diffuse villous synovitis in which there were no definite evidences of osteo-arthritis Mr Johnson also referred to the comparative rarity of the origin of loose cartilages in joints resulting from detachment by injury of a portion of the articular surface

The CHAIRMAN congratulated Mr Lockwood upon the success with which he had followed up such a considerable series of cases The long villous processes found in the synovial membrane of some cases of rheumatoid arthritis were microscopically identical with the villous processes normally found in the rabbit's knee and which had masses of "mucoid" material projecting from them

Mr LOCKWOOD replied

EDINBURGH MEDICO-CHIRURGICAL SOCIETY

Ulcer[illegible] of Intestine —Typhus Fever

A MEETING of [illegible] Society was held on May 3rd, Sir JOHN BATTY TUKE [illegible] being in the chair

Dr [illegible] transverse [illegible] was inserted into [illegible] the wound Five [illegible] rectal anus was brought [illegible] and healthy woman and no [illegible] resected, [illegible] tained

[illegible] CLAUDE B KER con- [illegible] cal Features of an [illegible] was at one time [illegible] Edinburgh and [illegible] ongst the poor

but also in the ranks of the medical profession. Owing, however, to improved social conditions amongst the lower classes and better hygienic conditions generally epidemics of typhus fever have practically disappeared and even an outbreak such as the one now described was an exceptional event Accurate information regarding the prevalence of the disease in the city previously to the adoption of the Notification Act in 1879 was impossible, but Murchison gave the figures of those admitted to the Edinburgh Royal Infirmary during the years 1862 to 1871, and these amounted in all to 2824 cases—a small proportion only of those affected During the 10 years 1880-89 there were 355 cases notified and during the last nine years 127 cases were reported If, however, the number in the recent epidemic (79) was excluded the average number of cases per year from 1890 to 1897 was only six It was of interest to note the diminution in the death rate in recent years From 1880 to 1889 the mortality was equal to 28 per cent, while in the subsequent nine years it had sunk to 14 per cent The following was a brief history of the recent epidemic In the first week of October, 1898, four doubtful cases were admitted to the City Hospital All of these patients came from one neighbourhood (Simon square) and resided within 100 yards of each other In the following week three other cases were admitted The number of admissions steadily increased during the remainder of October and November, but decreased again in December and was followed by the disappearance of the disease completely by the middle of January of this year The presence of the disease in many towns and districts of Scotland afforded sufficient grounds for maintaining that the infection was certainly introduced into the city from without and it had probably existed for several weeks before it was recognised in October, as at this period several cases arose simultaneously in families where supposed influenza had existed previously A man who had resided in one of the worst parts of the affected area died in the beginning of September from "pneumonia" and a "wake" was held for two days over his body This was in all probability a case of typhus fever, for three of those who "waked" the body were ill with supposed influenza and still later three others suffered from typical typhus fever The cases, with a few exceptions, occurred within a radius of a quarter of a mile and amongst families who were in constant intercommunication Those cases which occurred outside this area were clearly traced to infection from this focus Actual contact was proved in every case of those affected Members of the patient's family might mix with other families on the staircase or outside the house apparently with impunity The dissemination of the disease by actual contact was demonstrated by interesting examples in this epidemic In one case 22 members of a single family caught the disease and seven of them died It was proved also in this epidemic that the infection might be carried by fomites though they were not nearly so active as was generally believed The means which ought to be adopted to prevent the spread of the disease were—(1) isolation of the patient in hospital, and (2) quarantining for at least 15 days of all persons living in the same house as, and all those who had been in close communication with, the patient This was, as a rule, easily carried out amongst the class of people they had to deal with, provided some small compensation was given and means were taken to prevent their losing their employment The houses themselves and their contents should be thoroughly disinfected

Dr KER, after alluding briefly to the disease as it was described by Murchison and Moore, said that in three cases accurately observed in this epidemic the incubation periods were respectively 12 13, and 17 days At the beginning of the illness the temperature rose at once and usually reached its acme within three days In this epidemic the rash was usually well out by the fourth day Dr Ker then described fully the usual clinical features of the disease In this group of cases the temperature was never less than two days in falling to the normal and in the majority of cases it took three days The urine gave Ehrlich's diazo reaction in 15 cases which were examined and this showed how little reliance could be placed on the so-called test as a differentiation between enteric and typhus fevers One patient suffered from the same disease six years previously Two women went through the disease without interruption to their pregnancy Nine deaths took place out of a total of 79 cases—equal to 11 39 per cent Age had the greatest influence on the death rate Of 24 cases under 12 years of age none died and of 35 under 20 years only one

died At 20 years of age and upwards there were eight deaths. Of these nine deceased cases seven were strong, well-developed men and five were distinctly alcoholic As regards differential diagnosis from typhoid fever Ehrlich's diazo test was useless but Widal's reaction was the best method to use when in doubt. Strong beef-tea and meat juices were used partly to replace alcoholic stimulants. The staple diet was milk supplemented in some cases by Benger's food Cold water was given freely, also white fish, bread and milk, and eggs were allowed so soon as the temperature became normal. In about three-quarters of the adult cases and one-quarter of the children alcohol was required in doses of about half an ounce every two or three hours to each adult Cardiac tonics were not found to be of much service. Hypnotics were required by about half the adults Their early and free use was found to be very beneficial, sulphonal and paraldehyde were those most frequently employed. No antipyretic drugs were administered. Even in cases where the temperature remained at 105° F only frequent tepid sponging was employed Each patient was only allowed one sheet and one blanket as long as his temperature remained high Besides this any patient who passed his evacuations involuntarily was kept naked in bed in order to save exhaustion caused by changing the nightgown The ward temperature was usually not above 55° during the day and 50° during the night When a patient developed the crisis extra blankets were added to the bed and as soon as possible he was removed to a convalescent ward kept at an ordinary temperature. In all 16 nurses and four medical men had charge of the cases and none of these caught the infection This immunity might have been in part due to frequent baths and plenty of open air exercise. Another precaution might have contributed to the health of the staff—that was the sponging twice daily of the whole body of each patient with Jeyes' fluid diluted with water The patients' mouths were also carefully attended to, swabs of listerine and of an ointment of boric acid and menthol being used every few hours In conclusion Dr Ker said that this outbreak was at least of average severity and that there had been no change of type since the days when the fever used to infest the city —Dr JAMES CARMICHAEL said that when he was resident in the Royal Infirmary in 1865 there were 311 cases treated in the wards in 15 months and the mortality was then 12 per cent At that time a large proportion of students and residents (including Dr Carmichael himself) took the disease —Sir JOHN BATTY TUKE, Dr AFFLECK, Dr JAMES Dr ARGYLL ROBERTSON, and Dr CHURCH also joined in the discussion.

ROYAL ACADEMY OF MEDICINE IN IRELAND

SECTION OF OBSTETRICS

The Samaritan Hospital for Women, Belfast.—Uterine Cancer

A MEETING of this section was held on April 21st, Dr. F W KIDD, the President, being in the chair

Dr JOHN CAMPBELL read a paper entitled "Two Years' Work at the Samaritan Hospital for Women Belfast" This hospital was founded in 1872 by the late Dr W K. M'Mordie and the present building was erected in 1874 through the munificence of the late Mr Edward Benn In 1893 Mr Forster Green generously added two cancer wards The hospital contained 30 beds Each patient brought a printed form signed by her medical attendant recommending her "as a fit person to receive gratuitous advice and treatment" This system worked well and threw the responsibility or conniving at hospital abuse on the members of the local medical profession Patients to be operated on were well scrubbed with soap-and water and wore boric compresses over the seat of operation for three or four days beforehand The day before operation the region was well washed with soap-and water, rubbed with turpentine again washed with soap-and water, and finally washed with one in 1000 sublimate solution and covered by a compress wrung out of the same This precaution was repeated on the morning of the operation day The operator's hands were cleansed by thorough washing, followed by washing in turpentine and again in soap-and-water They were then put through the permanganate and sublimate processes in succession Indiarubber gloves were used if a septic case had been recently handled The gloves were boiled. Chloroform was given by Junker's inhaler Flushing the abdomen was done in tuberculous peritonitis and in cases in which glairy fluid had escaped into the abdomen Drainage was used after flushing in cases where much peritoneal fluid had been present and in cases in which pus had escaped. The current of opinion had now set in too strongly against drainage. A glass tube with a gauze wick was to be preferred and the bed-head should be raised Sterilised gauze was the dressing used for most cases Iodoform was used for wounds which were drained. During 1897-98 there were 44 intraperitoneal operations performed in the hospital by Dr Campbell with a mortality of 4½ per cent Before dangerous operations the patient and a near relative signed a printed form authorising Dr Campbell "to perform whatever operation he may think necessary"—The PRESIDENT expressed his approval of these printed forms He thought that gloves should be used in operations only when it was suspected that the hands could not be rendered completely aseptic He did not agree with Dr Campbell's opinion that all the dangers of chloroform were due to maladministration When chloroform was administered guttatim he had seen no ill effects Dr Campbell's mortality of 4 5 per cent was very satisfactory —Dr SMITH said that he had practically given up drainage He believed that after a few hours no drainage took place, since a layer of protective lymph was thrown out round the tube which acted as a foreign body —Mr MCARDLE said that he did not believe there was any need for the printed form to be signed by patients about to undergo operation.—Dr MACAN agreed with Mr McArdle's remark about the printed form.—Dr PUREFOY said he was one of those who practised drainage but he never used a rigid tube

Dr MORE MADDEN read a paper on Uterine Cancer and its Treatment, in which he laid stress on the early recognition of this disease by local investigation as well as by microscopic examination of specimens removed by curetting in every instance of possibly adenomatous or cancerous disease of the uterus He believed that that disease was primarily developed in the cervix in the vast majority of instances Moreover, he held that it frequently remained localised there for a sufficient period to permit its complete and effectual cure by the timely amputation of the cervix, which, followed by the application of the actual cautery to the wound so produced, he regarded as the best method of treatment. In 31 instances in which the cervix was thus amputated there was no mortality consequent on the operation, in one of these, however, the disease returned in the uterus four months subsequently, in five cases it returned there or elsewhere within a year, in two within two years, in one within three years, and in one nearly four years after operation. But, on the other hand in 10 cases there was no return within a period of four years and in some there was no recurrence 10 years after the amputation of the cervix. For the relief of pain in cases of inoperable uterine cancer he recommended conium and orthoform To mitigate the fœtor of discharge he relied on terebenthene injections peroxide of hydrogen, and a 1 per cent solution of formalin As local applications in open carcinoma he had experienced most benefit from the employment of celandine and methylene blue

BRADFORD MEDICO-CHIRURGICAL SOCIETY —A meeting of this society was held on April 18th, the President, Dr Berry, being in the chair —Dr Eurich gave a Microscopical Demonstration —Dr J B Hall showed (1) a small Dermoid Cyst or the Ovary in which there were three cavities, the first containing hair the second teeth and bone, and the third a mucoid fluid, and (2) a Calculus removed six months after lithotrity —Dr Kerr showed a case of Optic Neuritis following measles —Dr Rabagliati showed the Pelvic Organs with some Intestine removed post mortem from a patient who had suffered from fæcal fistula following pelvic abscess —Mr Wilmot showed a patient suffering from Acromegaly —Dr Metcalfe read a paper on the Operative Treatment of Uterine Cancer After alluding to a case of cervical cancer which he had had recently under treatment Dr Metcalfe discussed the relative propriety of the operations of supra vaginal amputation and of vaginal hysterectomy While admitting that there was a very large body of modern opinion in favour of complete hysterectomy he

cited Schroeder, John Williams, and others who advocated supra vaginal amputation, and pointed out that the immediate mortality from hysterectomy was higher than from supra vaginal amputation, while the recurrence rate was no lower The advocates of hysterectomy said that the high recurrence rate was due to the fact that hysterectomy had been reserved for more severe cases while supra vaginal amputation has been practised on the early cases Dr Metcalfe then described the distribution of the pelvic lymphatics and expressed the opinion that it was impossible by vaginal hysterectomy to remove the whole of the diseased area together with the lymphatic glands, and consequently that if the disease had spread beyond the limits of the uterus recurrence was probable after either hysterectomy or amputation of the cervix —Dr Rabagliati, Dr Wood, Dr Hall, and Mr Althorp discussed the paper and Dr Metcalfe replied —Mr Miall read a paper on Contagion from a Historical Point of View He said that disease was in very early times considered to be transmissible by charms and ceremonies, some of which were still extant Thucydides records the contagious character of the plague at Athens, B C 430, and about the same time Hermippus, the comic poet, mentions the itch as transmissible A little later Isocrates alludes to consumption as contagious and Aristotle has no doubt of the contagious nature of the plague But the strictly medical writers in Greece before the Christian era ignore contagion Aretæus was the first medical author who recognised contagion at all, this was in the second century A D Bubonic plague could be traced back further than any epidemic disease, it was now possible to identify it in the sixth century A D, when it pervaded the Roman Empire, Eastern and Western, for 50 years According to Gibbon it depopulated the most flourishing countries, some of which have never recovered For three months from 5000 to 10,000 persons died daily at Constantinople At this time Mayrius looks upon it as decidedly contagious, while Procopius, another contemporary historian, denies contagion in strong terms For a thousand years after this the same disease appeared at intervals in every country in Europe The recognition of small pox by Rhazes in the tenth century was an important event in the history of epidemics, for though the disease had probably appeared long before it was not properly marked off by physicians From that time measles, chicken pox and ultimately scarlet fever, typhus fever, and enteric fever were gradually analysed and separated from one another The belief in contagion was gradually placed on a firmer foundation Rhazes does not lay much stress on it, though he admits that small pox and measles are contagious He dwells principally on the great susceptibility of children and the less susceptibility of older persons There were thus three lines of thought in ancient history in regard to epidemics—the idea of contagion, that of the patient's susceptibility, and that of a common cause for epidemics These three theories still contended with one another

LIVERPOOL MEDICAL INSTITUTION —A meeting of this society was held on April 27th, Dr Macfie Campbell, President, being in the chair —Dr John Hay read notes of Three Cases of Pulsus Paradoxus In the first the abnormal pulse condition was associated with the dyspnœa of acute bronchitis in a child, aged three years, and was only a temporary phenomenon The second case was one of pericarditis with effusion complicated by serous effusion into the right pleural cavity, the removal of this fluid improved the pulse condition, but the pulsus paradoxus again became well marked without a re accumulation of fluid in the pleural cavity The third case was one of reversed pulsus paradoxus, the arterial pulsation in the vessels of the right side of the neck and right arm disappearing during expiration It was observed in a man suffering from aneurysmal dilatation of the arch of the aorta. The cases were illustrated by pulse tracings and charts of the chest conditions —Dr Bradshaw considered that the anacrotic character of the pulse in the last case was due to the percussion wave being largely lost in its transmission through the sac of the aneurysm It was followed by a slowly advancing tidal wave The increased anacrotism during expiration was to be explained by increased interference with the passage of the tidal wave —Mr Frank T Paul exhibited a patient upon whom he had performed Colotomy by a new method The divided large intestine was conducted for some distance between the muscles of the abdominal wall and then brought to the surface This allowed of efficient control by a light horseshoe truss —Mr Rushton Parker exhibited a boy whose Right Upper Extremity had been almost totally Avulsed by machinery, necessitating the removal of the whole except a short piece of the clavicle The subclavian artery had been torn across The injection of saline solution into the veins acted very beneficially —Dr Whitford exhibited a patient who had been more or less under his care and treatment for Lupus for a period of 17 years The patient came of a very tuberculous family Some of the scars as the result of treatment were elastic and almost like normal skin The treatment had been scraping with the application of caustic potash in sticks.—Dr Permewan related a case of Acute Rhinitis which had caused general infection of the system and in which treatment of the nasal condition caused rapid subsidence of the fever —Dr Carter said that in all cases of apparently inexplicable fever the nasal cavities should be carefully examined He illustrated this general statement by brief reports of several cases —Dr Clemmey in giving an account of a case of Rupture of the Kidney said that the patient received a kick from a horse on the front of the abdomen on Sept 21st, 1898 The first symptoms of pain, collapse, retching, and hæmaturia were treated by fomentations and opium On Sept. 30th, owing to the temperature rising and pain of a grinding character becoming more acute, the loin was opened exposing the ruptured kidney The rupture extended half way through the substance, right across the posterior aspect, and into the pelvis of the kidney Smart bleeding was controlled by ice and packing followed On Dec 6th the tube was removed and on April 13th, 1899, the wound was healed The patient had since followed his employment as a "timber carrier" In three other cases of severe injury to the kidney with the ordinary symptoms of rupture no operation was required, rest, fomentations, ice, and opium being the treatment adopted Whether secondary lesion of the kidney would follow in this case it was at present too short a time to say —Dr Imlach, Dr Given, Mr Paul, and Mr Rushton Parker spoke on the case —This being the last meeting the President briefly reviewed the proceedings of the session

WEST LONDON MEDICO-CHIRURGICAL SOCIETY —An ordinary meeting of this society was held in the society's rooms at the West London Hospital on May 5th, the President, Dr S D Clippingdale, being in the chair —Dr Charles Chapman showed specimens of (1) Adherent Pericardium in a child and (2) Calcification of the Aortic Valves —Mr H J Paterson read a paper on the Use of Gas in General and Dental Surgery After explaining that his object was to plead for a more extended use of nitrous oxide anæsthesia he pointed out that although using the single work "gas" he implied thereby that it was given with a suitable proportion of air or oxygen It had clearly been brought out by Dr Hewitt that gas should not be administered except in such combination The advantages of gas were its safety, pleasantness, and freedom from causing after effects He contended that it was safe, provided that asphyxial symptoms were avoided, to prolong nitrous oxide anæsthesia for one or more hours and recorded a case in which anæsthesia was maintained by means of gas and oxygen for two hours and 10 minutes The patient was ready for his tea within half an hour of his return to the ward There was no collapse whatever Mr Paterson expressed the view that the action of nitrous oxide was to prevent the elimination of carbon dioxide from the blood, so diminishing the oxidative processes of the tissues by a process of "internal asphyxia" There was no evidence that prolonged administrations affected the heart injuriously, provided that asphyxia was guarded against, and any effect on the heart was due to neglect of this precaution, In giving gas the danger signs were readily observed and gradually developed, hence he had come to the conclusion clinically that for operations long or short nitrous oxide gas mixed with air or, better, with pure oxygen was the safest anæsthetic they possessed Women as a rule took gas better than men Heavy smokers, and especially heavy drinkers, were bad subjects for this anæsthetic The danger of passing from gas anæsthesia to chloroform was pointed out Mr Paterson expressed the opinion that there were few operations which could not be performed under gas if desired and many in which this anæsthetic was preferable to either ether or chloroform Manipulating joints,

pelvic examinations, excision of varicose veins removal of lipomata, certain operations about the ear, operations of luxury, such as cure of varicocele or hernia, empyemata, &c., were very suitable for this anæsthetic Its use in cœliotomy was at present inadmissible on account of the difficulty of ensuring freedom from occasional retching movements. He strongly deprecated the use of gas as an anæsthetic during the removal of adenoids Mr Paterson then dealt with the question of prolonging nitrous oxide anæsthesia in dental practice and showed his new design of apparatus for administering gas through the nose Two female patients were then anæsthetised by this method by Mr Paterson while Mr Lloyd-Williams performed some prolonged operations on the teeth The demonstration was very successful.—In the discussion which followed Mr Swinford Edwards Dr G D Robinson Mr Starling, Mr Rickard Lloyd, Mr Lloyd Williams, Mr McAdam Eccles, Mr Bellamy Gardner Mr Keetley and Dr Chapman took part.

ÆSCULAPIAN SOCIETY OF LONDON.—A meeting of this society was held on May 5th, the President, Mr D H Goodsall being in the chair.—Dr E F Willoughby read notes of a case of Cystic Catarrh in a multipara, aged 45 years who had for two years suffered from severe abdominal pain, recurrent every two or three days, with vomiting and subsequent prostration Her general health was impaired, weight was lost and the usual symptoms of obstruction to the outflowing of bile into the intestine were present. Toluylenediamine 0 05 was given for seven days with no appreciable result, then the above quantity was given morning and evening with a result that in two months all symptoms disappeared.—Dr Willoughby also read notes of a case of Endometritis of six years' standing in a young married woman who was successfully treated by dilatation of the uterus curetting, and an application of iodo-phenol.—Dr B G Morison read notes of a case of Traumatic Subacute Cerebral and Spinal Meningitis in a man, aged 53 years, on whose head a picture had fallen On the fourth day there was stiffness of the right extensors of the head, on the sixteenth day the temperature was 39 7° C, there was acute pain of the head, left neck, and body generally Both knee-jerks were present but both were absent two days later On the twenty third day there was right facial and parieto-frontal neuralgia with suffusion of that conjunctiva developed Pyrexia continued for 23 days In eight weeks from the injury the knee-jerks were absent but were feebly present again in the eleventh week In the fourteenth week the patient returned to business well.—Mr Reginald Brown read notes of a case of (1) Facial Palsy in a 10 months infant from a known exposure to draught and (2) Cerebral Meningitis in a man, aged 32 years who had had pleurisy five months previously He complained of a sudden onset of numbness of the tongue spreading to the lower and thence to the upper lip, right index finger and thumb aphasia then developing, but the whole series passed in half an hour In the next week he had five or six of these attacks daily Later the tongue deviated to the right with tremor yet it was possible to protrude it straight There was no paresis elsewhere no optic neuritis, and no albuminuria. There developed some lessened sensation of the right side, increase of aphasia, and later marked facial palsy with conjugate deviation of the eyes to the right In a month from the onset of symptoms the patient died. At the post mortem examination an old psoas abscess acute pulmonary tuberculosis, and general cerebral meningitis more intense on the left side were found

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The seventh meeting of the forty third session of this society was held at the Royal Kent Dispensary Greenwich road, on May 5th, Dr Morgan Dockrell, President, being in the chair.—Dr Morgan Dockrell delivered his presidential address on General Health as a Factor in Skin Diseases and concluded 'I have now only to tender you my thanks for the very patient hearing you have given to me this evening My object has been to present you more with an abbreviated address than to give you the full text of my presidential address The subject is a vast one and would not easily be covered in a couple of hours and so I have preferred to give you the salient points and later those of you who are sufficiently interested will have an opportunity of reading the address in extenso I have to thank you further for the honour you have done me in electing me to the presidential chair of this society Gentlemen, this is not a mushroom society—we rank thirteenth in point of age among a large number of medical societies which have sprung up the last 40 years We have among our members, I should think the oldest member of the College of Surgeons, our esteemed and worthy friend, Dr Prior Purvis, who did us the honour for upwards of 40 years to remain our treasurer We have also as a member probably the oldest graduate in medicine of the Glasgow University and we still number among our members a president who occupied this chair 34 years ago Our society is not alone useful from its purely medical character, but is also of great service in that it promotes the well being and comradeship of a large number of men practising in this district. Here we are able to have all the rough corners knocked off; here we have an opportunity of meeting our fellow practitioners and learning to appreciate their true worth and also of promoting that harmony which it is so important should exist among medical men practising in one neighbourhood. Gentlemen, it is my sincere wish, and I am sure the wish of all of you, that the West Kent Medico-Chirurgical Society should continue to flourish and that it may still go on doing the good and excellent work in the future which it has done in the past."—After the conclusion of the President's address a very enjoyable smoking concert was held. Amongst the artists who kindly gave their services were Messrs. Courtice Pounds, Carl Brandt, Walter Grace, F. H. Cheesewright (vocalists), Charles Froude (musical sketches), H. Wharton Wells (piano), and Dr Byrd Page (conjuring)

PLAISTOW AND CANNING TOWN MEDICAL SOCIETY.—A clinical meeting of this society was held at the Public Hall, Canning Town on April 28th Mr Percy Rose being in the chair.—Dr T D Lister pathologist to the East London Hospital for Children, gave an address on Broncho-Pneumonia in Children illustrated by lantern slides After dealing with the special anatomy and physiology of the infantile respiratory organs and the various causes which predispose to broncho-pneumonia in children the speaker showed drawings of the various micro-organisms found in cultures from cases of the disease and explained this relation to homologous and heterologous infection. He expressed the view that while all cases of broncho-pneumonia tended in the later stages to exhibit a mixed infection, primary cases would, as a rule, yield a pure culture in the earlier stages By means of lantern slides (which were kindly lent by Professor Sidney Martin or were procured from specimens in the laboratory of the East London Hospital for Children) the changes excited in the bronchioles and air vesicles the various methods of extension of the inflammation and its results, especially in abscess, fibrosis and non tuberculous caseation, were demonstrated. The post-mortem appearances were then described and a distinction was drawn between the disseminated and lobar types of the disease The latter the speaker held to be the same disease as croupous pneumonia modified by its occurrence in puerile lung and he suggested that the air vesicles were sometimes attacked first by the catarrh. Dr Lister proceeded to illustrate his remarks upon the diagnosis and prognosis of the disease by reference to the charts in typical and atypical cases and drew the attention of his audience to the splenic enlargement which frequently accompanied an intercurrent tuberculous infection In speaking of the modern treatment of the disease he demonstrated a pharmacological basis for the exhibition of belladonna as now largely prescribed in the wards of the East London Hospital for Children in combination with the usual topical and hygienic measures.—The meeting which was well attended closed with a vote of thanks to the lecturer

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A DAY OF REST IN THE COUNTRY FOR LONDON NURSES.—For three years past the nurses of the London hospitals and metropolitan nursing institutions have been invited to spend a day at Hertingfordbury The object has been to combine with an opportunity of physical rest the spiritual help afforded by two short services held in the parish church. By the invitation of Canon Burnside this provision will be renewed on Thursday, June 1st when the Bishop of Southwark has kindly consented to give the addresses. The only expense to the nurses will be a railway fare of 2s 6d and those who can be spared from their work will be warmly welcomed. All information may be obtained from the Rev A G Locke chaplain of St Georges Hospital, or from Canon Burnside, rector of Hertingfordbury, Hertford.

Reviews and Notices of Books.

A Practical Handbook on the Muscular Anomalies of the Eye By HOWARD F HANSELL, A M, M D, Clinical Professor of Ophthalmology, Jefferson Medical College, and WENDELL REBER, M D, Instructor in Ophthalmology, Philadelphia Polyclinic and College for Graduates in Medicine With 28 Illustrations and one Plate London H Kimpton 1899 Pp 182 Price 6s net

THE functional anomalies of the muscles of the eye have attracted of late years a large amount of attention in America and the subject is treated at great length in the treatises which have been published on the other side of the Atlantic New terms have been suggested and have been accepted, and all ophthalmological treatises now consider orthophoria, esophoria and esotropia, exophoria and exotropia, hyperphoria and hypertropia, cyclophoria and heterophoria, conditions which were formerly very imperfectly described and understood This present volume places before the reader in short compass the symptomatology, diagnosis, and treatment of each of these conditions and of the more complex states caused by their combinations—such as hyperexophoria and hypoexophoria, hyperesophoria and hypoesophoria The volume commences with a brief but exact description of the anatomical features of each of the muscles moving the eye, as well as of the levator palpebræ and orbicularis palpebrarum, with their vascular and nervous supply and their precise action The authors point out that the main symptoms by which ocular palsies reveal themselves are limitation of movement, false fixation, diplopia, vertigo, and, lastly, vicarious rotation of the head The effects of paralysis of each of the muscles are given in detail The means of diagnosis are well given and consist of the prism test, the Maddox rod test, the convex spherical glass test, the parallax test, the cover test, the cobalt test, and the Maddox double prism test

There is a good chapter on Musculo-dynamics, describing the various instruments which have been devised to determine the power of the muscles to overcome the displacement caused by prisms put in different positions—such as Risley and Jackson's rotary prisms, Stevens's and Wilson's phorometers, Stevens's tropometer and clinometer, and Landolt's ophthalmo-dynamometer In regard to treatment, the authors contend that it should invariably be inaugurated by correction of any optical defect which may be present, then should follow in succession the internal administration of nerve tonics, convergence training, correction by prisms, and finally, tenotomy A short section is devoted to this Three pulse co and another to the operation for advancement of bro hitis tendons The book will prove serviceable and ad attentively by all who are practising operation the several

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should be r etrics By BARTON COOKE HIRST, M D ophthalmology tions London The Rebman Publishing 8vo Pp 850 1899 Price 28s

A Text-book of Ob ributions of Professor Hirst to the With 653 Illustr t Obstetrics lead us to anticipate Company Royare the reading of a text-book of mid-

THE valuable con alone In this work the usual American Text book o w first the Physiology and then the with considerable pleas transmu, and the Puerperium is wifery written by hi wed by and the Physiology and arrangement of considering macrotism fant being considered pathology of Pregnancy, Labo interfe d followed, Obstetric Operations Pa he Anatomy of the Pelvis Pathology of the New-born and the Development of separately in two chapters at the In In considering hydram The first three chapters upon t ntement in the knee-elbow and Sexual Organs, Menst the Fœtus

position or of intermittent uterine contractions as an aid to diagnosis The author says that in extreme distension of the uterus it may be justifiable to resort to an exploratory abdominal section Surely in such a case the passage of a uterine sound would at once clear up the diagnosis with much less risk to the patient The chapters upon the Diseases of the Fœtus and the Pathology of the Pregnant Woman are perhaps the best in the book. We notice, however, one curious omission no mention is made of carcinoma of the cervix complicating pregnancy and nothing is said as to the treatment for such a condition In considering the treatment of an ovarian cyst in the pelvis complicating labour Cæsarean section is recommended, together with removal of the tumour A better mode of treatment which is not alluded to is ovariotomy followed by delivery of the child *per vias naturales* the cervix, if necessary, having been dilated with hydrostatic dilaters The section upon Ectopic Gestation is illustrated by an interesting series of photographs from cases of sudden death due to this condition

The chapter upon the Puerperium is full and contains a large amount of practical information for both students and practitioners The description of obstetrical operations is, upon the whole, disappointing, and we must protest against the use of the term "postural version" The correction of a faulty position of the presenting part by placing the patient upon one or the other side cannot under any circumstances be called "version" and such a use of the term is most misleading Professor Hirst is in favour of Krause's method of inducing labour and regards the use of dilateable bags with disfavour So do we, but Champetier de Ribes's bag, which is not mentioned at all, is not dilateable and is certainly a most efficient and rapid method of causing dilatation of the cervix This bag only bursts when it is improperly made or improperly used We do not agree, either, with the author in thinking cœlio-hysterectomy preferable to cœlio hysterotomy If the patient is very anxious to avoid the risk of another pregnancy this can be practically ensured by ligature and division of the Fallopian tubes without any necessity for the mutilation entailed by removal of the uterus

Many of the illustrations are original and of great excellence, others, reproductions of photographs, possess all the faults of this mode of illustration They present a mass of unnecessary detail which prevents the essential features of the illustration from being readily recognised and renders them less useful than drawings and diagrams would be to the student. We must protest, too, against the totally unnecessary reproduction of nude figures at various terms of pregnancy which show nothing of any value and might well be omitted

Although we have expressed our disagreement with some of the views put forward by the author, and have had to call attention to one or two minor omissions, yet we must congratulate Professor Hirst upon the production of an original and eminently readable text-book, and one which is likely to be appreciated by students not only in America, but also in this country

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The Diseases of Children By JAMES FREDERICK GOODHART, M D Aberd, F R C P Lond., Consulting Physician to the Evelina Hospital for Sick Children, late Physician to Guy's Hospital and Lecturer in Pathology in its Medical School Sixth edition with the assistance of G F STILL, M A, M D, M R C P Lond, Medical Registrar and Pathologist to the Hospital for Sick Children, Great Ormond street London J and A Churchill 1899 Pp. 720 Price 10s 6d

DR GOODHART'S book on the Diseases of Children is too well known to need any remarks from us on its general merits In the preparation of the present edition Dr Goodhart has

had the assistance of Dr Still and the work has been brought fully up to date

In the chapter on Diphtheria the use of antitoxin is described and stress is laid on the importance of its early administration.

The most important changes seem to have been made in the chapters dealing with Diseases of the Nervous System. A section has been added on Sunstroke, and that on Friedreich's Disease has been amplified. Tetanus and tetany receive due notice and sections have been added on various mental conditions—such as "moral insanity" The defects of speech are also commented on The chapter on Meningitis is a most interesting one, in speaking of the pathology of this condition Dr Still s investigations are modestly confined to the following sentences "There is good reason for believing that this disease is due to a micro-organism, the diplococcus of posterior basic meningitis, and that this is the specific micro-organism of the disease. The same micro-organism has also been demonstrated in the periarthritic exudation which occasionally occurs as a complication of this form of meningitis"

The value of the book as a work of reference has been added to by a more complete table of contents and index. We can cordially recommend this volume to those who are seeking a special treatise on diseases of children

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The Resources of the Sea By W C McINTOSH M.D Edin., LL.D F R S London, J Clay and Sons 1899 Pp 246 Price 15s net

THIS book has been written with the object of bringing before the general reader a careful and as far as we can judge, impartial series of experiments and observations on the food fishes of the Scottish coast and of the results of closing certain areas to trawlers In 1884 a Royal Commission caused certain experiments to be carried out in order to discover how much truth there was in the scare that too persistent fishing was seriously depleting our home waters of fish and that the constant use of the trawl destroyed the marine animals at the bottom of the sea which form so large a part of the food of fish In addition to this it was suggested that trawling injured the spawn and fish in an immature condition As the result of this Royal Commission certain areas have been closed for several years to trawlers and the author thinks that the time has now arrived when the results of this action may be fairly reviewed and criticised.

The introductory chapter shows the important influence which man has exerted on terrestrial animal and plant life as well as on such aquatic mammals as the Cetacea, Sirenia, and Pinnipedia. The prevalence too of fishes in inland waters can be greatly influenced by the action of man, but when the greater number of marine animal and vegetable forms are considered the author submits that they are independent of man s efforts He points out how impossible it would be for the most persistent trawling to render any area of the sea bottom barren, as has been suggested, and how rapidly the barrenness if it could occur would be done away with on any intermission of the trawling He shows how generations of fishers have not produced any appreciable effect on such forms of sea life as coral, sponges, lugworms, and many marine molluscs He grants that the larger specimens of the common food fishes may become fewer by persistent fishing but this, he points out, is an evil which would carry with it its own remedy by causing the trawlers to temporarily seek more remunerative grounds

The succeeding chapters contain an immense amount of detail with regard to the methods of fishing on different parts of the Scottish coast and the habits of fish which are caught in different places and a different times Briefly stated, the main conclusions to which the author has been led are—first, that there is a similarity of results at all the stations where investigations have been conducted, secondly, that the impoverishment of any area is self curative, thirdly, that the abundance of fish has not been affected by the closure and that there are no substantial data for instituting or continuing the closure, and lastly, that there are no reasons for taking other than a hopeful view of our fish-supply for the future

The volume is well written and well illustrated and should be read by all who are interested in the important question of our fish supply

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LIBRARY TABLE

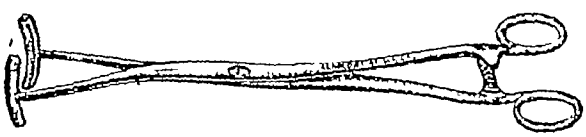
Bericht über die Siebenundzwanzigste Versammlung der Ophthalmologischen Gesellschaft, Heidelberg 1898 Unter Mitwirkung von E VON HIPPEL und A WAGENMANN, redigirt durch W HESS und TH LEBER Mit 16 Tafeln und 11 Abbildungen im Text Wiesbaden Verlag von J F Bergmann 1899 Preis 7 Mark. (*Report of the Twenty-seventh Congress of the Ophthalmological Society, held at Heidelberg 1898* Edited by W HESS and TH LEBER, assisted by E VON HIPPEL and A. WAGENMANN With 16 Plates and 11 Illustrations in the Text Wiesbaden J F Bergmann Obtainable from F Bauermeister, Foreign Bookseller, Glasgow 1899 Price 7s)—This report of the Congress, held in Heidelberg in August of last year, contains accurate records of 25 papers which were read at the Congress, of 19 demonstrations, and of six articles which were not read. The Congress was received with warm words of welcome by Dr Hess and was opened by Dr Landolt who was elected chairman The first paper read was by Dr Norman-Hanser on Methodic Conjunctival Suture as the Appropriate Treatment of Severe Wounds of the Globe. This proceeding met with general approval amongst members of the Congress, several of whom had practised it frequently Dr A Siegrist of Basel read a paper on the Dangers of Ligature of the Common and Internal Carotid to the Human Eye and described a case in which a patient who was suffering from pulsating exophthalmos and in whom the eye was sound and the vision good lost the sight immediately after the ligature of the carotid, the eye presenting the symptoms of embolism of the central artery, a condition which was succeeded by progressive sclerosis of the choroidal veins Dr Th Axenfeld of Rostock contributed a paper on the Physiology and Histology of the Lacrymal Glands in which he has satisfied himself that the reason why infants do not shed tears in crying is that there is no adenoid lymphatic intermediate tissue in their glands whilst this tissue is abundant in the adult The glands are also relatively small in the infant, the protoplasm of the cells is more coarsely granular and darker in the adult than in the infant Dr L Heine of Marburg read a paper on the Refractive Index of the Human Lens after Section of the Zonula with remarks on the Refractive Index of the Lenses of Myopic Eyes Dr W Uhthoff of Breslau contributed an interesting communication on Visual Hallucinations which was followed by a good discussion in respect to the central or peripheric origin of such illusions Dr E von Hippel of Heidelberg read a paper on the Clinical Diagnosis of Endothelial Changes of the Cornea and their Significance for the Explanation of various Diseases of the Cornea. Dr P Silex read a paper on the Central Innervation of the Ocular Muscles Dr St. Bernheimer of Vienna read a paper on the Reflex Path of the Pupillary Contraction in which he showed that the pupillary nerve fibres partially decussate in the chiasma and the same subject was treated by Dr Ludwig Bach of Würzburg Another paper was by Dr E Harter of Jena and described the effects of Section of the Optic Nerves in Young Animals Dr H Schmidt-Rimpler of Göttingen read a paper on Ulcus Rodens Corneæ A paper was read by Dr E Rählmann on Margino-plastic

Operations on the Lids with Transplantation of the Mucous Membrane of the Eye for the cure of Trichiasis in Trachoma The subject of the Relation between the Intraocular Pressure in Accommodation and upon the Range of Accommodation in different Mammals was taken up by Dr C Hess of Marburg, but the results obtained owing to difficulties in experimentation do not seem to be very satisfactory Dr A von Hippel, Dr W Uhthoff of Breslau, and Dr E Pflüger of Berne gave details of two cases of Total Colour blindness Dr H Sattler of Leipsic described an improved method of procedure which he had devised for the removal of the Lens in cases of Advanced Myopia Dr L Laqueur of Strasburg in Alsace described a case of Homonymous Hemianopsia with the conditions found at the necropsy Dr W Schoen gave an account of his researches on the Pathological Anatomy of Glaucoma Prolapticum Anatomicum Dr F Dimmer of Innsbruck gave the results of his examination of the Chiasma and remainder of the Optic Tracts taken from a man from whom one eye had just previously been removed, although the vision was normal, for an epithelioma The Formation of Thrombi was discussed in a paper by Dr J von Michel of Würzburg Nævi and Sarcomata of the Conjunctiva were considered in a paper by Dr Hugo Wintersteiner of Vienna Dr K Baas of Freiburg in Bavaria described the characters of Phlyctenulæ which he believed to be the response of diseased scrofulous tissues to many external stimuli Dr G Abelsdorff of Berlin gave the appearances of the fundus of the eye in Malays, Mongols, and Negroes Lastly, Dr A Groenow of Breslau read a paper entitled "Bacteriological Researches on the Etiology of the Inflammation of the Eye in Infants" A sitting of the congress was devoted to the exhibition of cases and the demonstration of preparations and instruments

New Inventions.

NEW UTERINE PREHENSILE AND COMPRESSION FORCEPS

THE instrument depicted in the accompanying illustration will be found useful as a hæmostatic forceps not only in cases of passive hæmorrhage from the unimpregnated uterus, metrorrhagia, &c, but also in cases of free hæmorrhage in impending abortion in the early months of pregnancy A duckbill or cylindrical speculum is first to be introduced and the parts are to be cleansed by hot water (syringing or otherwise) My self retaining tenaculum hooked into the lip of the os uteri will draw the cervix within the grasp of the forceps, the latter is now to be closed sufficiently to arrest the flow of blood, locked, and



left *in situ* so long as required while the patient lies quietly on the bed or couch In cases of impending abortion in the early months by retaining the blood in utero it will distend the cavity, separate the membranes, and hasten the evacuation of the uterus when the forceps is withdrawn. It will also obviate the necessity for plugging the vagina This forceps will be found valuable during the operations of supra vaginal amputation of the cervix uteri and vaginal hysterectomy The convex shape of the blades will also prove a guide to the preliminary incisions in the vaginal roof when the cervix or the entire uterus is being removed from below, and by opening the blades to their full extent and pressing them upwards they will stretch the vaginal fornices and facilitate the removal of the cervix in the operation of abdominal hysterectomy The instrument has been made by Messrs Arnold and Sons, West Smithfield, from my sketch and description The rubber cord let into the concave sides of the jaws prevents injury to the cervix from continued pressure The blades are detachable and easily sterilised by placing in boiling water

Cheltenham ALEXANDER DUKE, F.R.C P Irel

APPARATUS FOR THE ADMINISTRATION OF OXYGEN

THE instrument represented in the illustrations is intended for the administration of oxygen gas and has been made by Messrs Krohne and Sesemann, Duke-street, W, on the lines of one previously used by me with satisfactory results From a T piece secured by a head band there run

FIG 1

Profile view of head band forehead-piece supply pipe, and nasal and oral delivery tubes in adjustable carrier with nasal bridge.

FIG 2

Anterior view of head band, frontal junction-piece, supply pipe, and nasal and oral delivery tubes in adjustable carrier settled in position by nasal bridge.

four rubber tubes mounted on flexible wire in order to enable them to retain their position These tubes are, moreover, kept in place by a carrier settled by a nasal bridge,

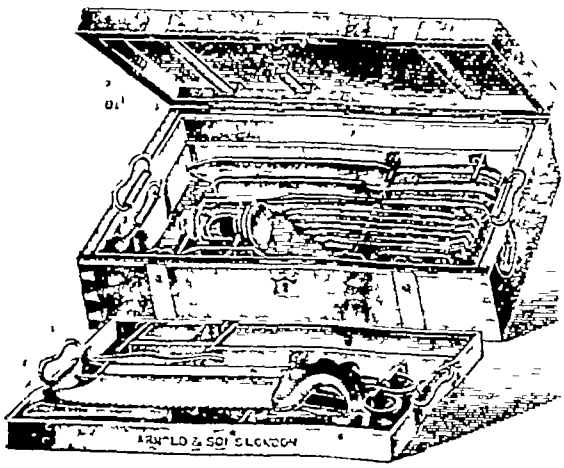
which carrier can be adjusted to a long or short nose by the screws and arms at the extremities of the horizontal limb of the T piece The four tubes wire-mounted and curved, end in vulcanite nipples The nasal tubes do not pass into the nostrils but are merely inserted at the most anterior part of each nasal aperture, permitting free inspiration and expiration The mouth tubes run to the angles or to just within the angles of the mouth After a fair trial of face-pieces, nose and mouth. tubes, and funnels, I have adopted the above, which I venture to hope may also be of service to others requiring an oxygen inhaler My object has been to avoid as far as possible the sense of suffocation imparted by an ordinary face piece, also the discomfort of a tube passed into the nostril or a mouth piece which semi conscious tobacco smokers persist in treating as a pipe-stem Evidently there is free means of escape for the respiratory waste products A pneumonia patient breathes either solely through his nose or through his mouth, and when this occurs the tubes which he does not make respiratory use of can be closed by pinch clips or taps provided for the purpose The oxygen can be kept in a gas-bag under the bed delivering continuously so many cubic feet per hour and is supplied by a tube bending over the head of the bed. The absence of a face-piece or funnel tends to prevent the patient's friends entertaining ideas of an "anæsthetic" which might be the cause of the unsatisfactory termination of a severe case

F W FORBES ROSS, M D Edin , D P H

Gower-street, W C

A NEW COMBINED PATHOLOGICAL AND BACTERIOLOGICAL POST MORTEM CASE

I WOULD direct attention to a combined pathological and bacteriological post-mortem case which has been made for me by Messrs Arnold and Sons of London The instruments which are contained in it are of the "aseptic" type while the metal aseptic body contained in its wooden covering can when removed from the latter be used as a tray to hold antiseptics In such a case it has been a



matter of difficulty to include only such instruments as are absolutely necessary and in this way to limit the weight and the cost I feel that I have fairly well succeeded in attaining a great measure of utility without great cost and that the case is one which will commend itself to members of the profession

ALEXANDER EDINGTON M B Edin

Bacteriological Institute Grahamstown.

A NEW CORSET BELT

WE have received from Mrs W G Johnson of 7, Old Bond street, W , a sample of Browett's patent self adjusting corset belt, a well made and serviceable article which has been found to give useful support not only in cases of obesity but also during pregnancy and after abdominal operations It does not go quite round the body but is worn under a corset which is prepared for it by having two button holed slits made over the hips on each side Each end of the belt has two straps with a row of eyelet holes and these straps passing through the above-mentioned slits are fastened to ordinary dress hooks on the corset By an ingenious arrangement of hooks in front the belt is prevented from rising up out of its proper place and at the same time the use of uncomfortable understraps is altogether avoided The belt is very light, weighing only three ounces The price is £2 2s in silk, or £1 1s in white coutille Cheaper qualities are made in grey jean for hospitals and dispensaries

THE METROPOLITAN HOSPITAL SUNDAY FUND

A MEETING of the Council of this Fund was held in the Mansion House on Wednesday, May 10th, when Sir Sydney Waterlow presided Among those present were Sir E Hay Currie, Mr Bryant, Mr Macnamara, Mr Wakley, Dr Glover, Sir George Bruce, Rev C H Grundy, Mr A. L Cohen, the Rev Prebendary Kitto, the Right Hon William Lidderdale, and Mr Albert G Sandeman Among the letters of regret for inability to attend the meeting was one from Mr Augustus Thorne who enclosed a donation of 100 guineas The Rev J Bradford, the Rev Canon Pennefather, the Rev G R Thornton, and Dr Stephen Mackenzie were elected to fill vacancies on the Council. The question of more largely advertising the next annual collection was referred to the General Purposes Committee, as was also a letter from the Rev G R Thornton suggesting that the clergy of all denominations should be summoned once or twice a year to hear a popular lecture by some prominent member of the medical profession in order that they might be able to appeal more forcibly to their congregations For the same purpose the Rev C H Grundy suggested that a reception of clergymen should be held at the Mansion House, when they could discuss among themselves the best means of making collections and of appealing to their congregations Mr A. L Cohen did not see the use of such a meeting and said that valuable help was given to clergymen already by the annual Supplement of THE LANCET The question of the date of the 1901 collection clashing with the bi-centenary of the Society for the Propagation of the Gospel was brought before the meeting and this matter was also referred to the General Purposes Committee A vote of thanks to the Chairman, proposed by Dr Glover who complimented Sir Sydney Waterlow upon the vigour and energy which recovered health had enabled him to display brought the meeting to a close

HEALTH OF MERTHYR-TYDVIL —The medical officer of health (Mr Dyke) reports that during 1898 there were 2495 births registered giving a rate of 34 7 , of these 73, equivalent to a rate of 2 92 were illegitimate. Vaccinations were performed in 1870 instances by public vaccinators There were 1409 deaths, compared with 1598 in 1897, equal to a rate of 19 5 per 1000 which is the lowest rate ever recorded in the district The present population is 71,903 with 12,912 occupied houses

BATTLE OF THE CLUBS THE COVENTRY PUBLIC MEDICAL SERVICE —The annual meeting of the service was held last week There were present Mr Faulder White (in the chair) Dr Brown Mr Callaghan Mr Collington, Mr Phillips Dr Rice, Mr Soden, and Mr Settle The treasurer reported that the financial condition of the service was highly satisfactory The general working also appears to proceed smoothly and no complaints have reached the secretary during the year It would thus appear that a medical service of this nature can be worked on practical lines and give satisfaction to the medical staff who have organised its working The committee also take every precaution so that the benefits are reserved exclusively for genuine working people It was reported that 2800 members were enrolled during the year bringing the total membership to 8281 There are 10 working members of the staff and as the number under each is strictly limited the committee feel that there is no great danger of overcrowding or lack of attention to individual patients The following officers were elected for the ensuing year President of Committee, Dr Haig , honorary treasurer, Mr Callaghan , honorary secretary, Dr Richardson Rice

THE LANCET.

LONDON SATURDAY, MAY 13, 1899

ON March 22nd, 1800, the Royal College of Surgeons of England received its first Charter and the Council of the College has decided to celebrate in 1900 the hundredth anniversary of this important event. The history of the way in which this Charter was obtained is instructive, for it affords a clue to much that otherwise would be difficult of comprehension in the annals of the College In 1797 a Bill was introduced into the House of Commons to re-establish the old Company of Surgeons which had been practically destroyed by the illegal action of the Master and the Court of Assistants Although this Bill had passed through the House of Commons and the second reading in the House of Lords, yet it was ultimately rejected chiefly as a result of a petition from the members of the old Company of Surgeons who showed that the Bill would put an end to many of the privileges which they had previously enjoyed But three years later (the Court of Assistants having in the meantime accepted the charge of Hunter's Museum) a Charter was obtained directly from GEORGE III without the intervention of Parliament By this Charter the Members of the College were utterly excluded from all participation in the government of the College, general meetings of the corporation were no longer to be held and the whole management of a body with great powers and greater privileges was vested in a self electing Council The Charter of 1843, by the creation of the order of Fellows, did something to give a representative character to the government of the College, but the large majority of the constituents of the College remained as before shut out from any share in the election of the members of the Council from examinerships and other posts of emolument or honour Even to the present day, though slight modifications in the Charter have been made, the Members as such are still as far as ever from having the position which is their due in the management of the affairs of the corporation

Though we have on so many occasions urged the claims of the Members of the College, so often pointed out, almost from the first appearance of THE LANCET, the errors, the anachronisms, the wilful blunders of the Council of the College, we have not been unmindful of the many advantages which have accrued to the science and practice of surgery from the establishment of this institution, and we have ever been ready to acknowledge the good which it has done, for with all its faults—and they are many—the Royal College of Surgeons of England is the greatest and chief representative of English surgery The good which it has done has been very great but the good which it might do is still greater

Appreciating, then as we do the benefits which the Royal College of Surgeons of England has conferred on surgery in this country, we welcome the suggestion that the centenary of the granting of its first Charter should be worthily celebrated At the last meeting of the Council the recommendations of the committee appointed to consider the matter were adopted In addition to dinners and other similar festivities it is intended that a supplementary Charter shall be applied for which will enable the Council to confer an Honorary Fellowship on distinguished persons, British and foreign, who are *not* Members of the College With this suggestion we heartily agree, for there is no way in which the appreciation of the College can be shown more appropriately than by the conferring of an honorary diploma This power is possessed by all the older Universities of Great Britain, and indeed by most of the universities in the world, and if employed judiciously it serves a most useful and valuable purpose Many of the members of the Council have themselves been the recipients of such an honour from universities and colleges both of this country and abroad It is very desirable that a body like the Royal College of Surgeons of England should possess the power of showing its appreciation of the merit of distinguished men who have done service to surgery or to other branches of science There need be no fear that these honorary diplomas will be mistaken for the diploma of Fellow obtained after examination or by election from among existing Members Such an error practically never arises, for the honorary diploma will of itself give no claim to the recipient to be placed on the Medical Register

It will have been noticed that these honorary degrees are not to be granted to those who are already Members of the College, for the Council already under the present Charter possesses power to grant the diploma of Fellow to Members of 20 years' standing, although the number of diplomas which may be thus conferred is limited to two every year and might well be increased To obtain these new and important powers it is necessary, as already mentioned, to apply for a new Charter, and the cost, though by no means small, need not be seriously considered, but while a new Charter is being applied for, would it not be well to insert in it some of the modifications which have been so persistently and so reasonably asked for by the Members of the College? No one, we should imagine, either Fellow or Member, will in any way oppose the application which the Council intend to make, for the new powers will be universally recognised as eminently desirable. Can any time more suitable than the present be chosen for the application for a new Charter in which the hitherto discordant elements of the College shall be united into one consistent whole? The claims of the Members have been recognised by meetings of the Fellows, many members of the Council itself are in favour of some concession and the reasonableness of the Members' requests has never been seriously impugned We appeal, then, to the Council of the Royal College of Surgeons of England to consider carefully whether they cannot insert in their proposed new Charter clauses which will give to the large body of Members of the College at least some share in its government A hundred years ago the privileges of the Members were arbitrarily taken away, the closing year of the eighteenth

century saw the establishment of a corporation in which the true constituents had no share or lot—a corporation which has done much good work and yet for 100 years has lived at variance and often at bitter strife with the Members whom it claims to represent Let the closing year of this nineteenth century witness the re formation of the College in such wise that the right of all the Fellows and all the Members to have a due share in the government of the College shall be recognised When we contrast the attitude of the Council, as shown in recent utterances with their attitude during the earlier years of the struggle we feel no small degree of hope that we are nearing the end and that common sense and that love of justice which is innate in every Englishman will incline the Council to grant to the Members the right to representation on the Council

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THE friends of hospitals and the friends of hospital reform alike must feel somewhat discouraged by the meeting of the Charity Organisation Society held on May 8th The meeting was called to consider the annual report of the General Committee for the promotion of a Central Hospital Board for London With one or two exceptions the speaking was good. There have been no better or more temperate, no more forcible or unanswerable, speeches in support of hospital reform than those delivered at the meeting by Sir WILLIAM BROADBENT and by Dr MACNAUGHTON-JONES But taking the general result of the meeting into consideration it is undeniable that the feeling produced is one of disappointment and discouragement The tendency to recrimination and disparagement between what we may call the hospital party and the party which wishes to abolish hospital abuse increases The oversights and the mistakes of the hospital officials are apt to be magnified by the practitioner of the neighbourhood who finds his patients drawn into the vortex of hospital relief to be treated by a recently qualified resident On the other hand, the inevitable errors of the practitioner who aims at filling his surgery in imitation of the crowding of the out-patient and casualty departments for sixpence or one shilling per head are apt to be noted when the cases are reviewed by the officials of these departments What friend of hospitals can look upon such tendencies and upon the exposure of such tendencies by smart speakers on both sides without regret? We will go much further and ask what friend of the profession who prizes its dignity and its due reputation can regard such controversies with anything but pain? The profession is one—inside the hospital or outside. The general practitioner should find in the hospital and its staff a veritable refuge for him and his patients in rare and difficult circumstances. The hospital and its staff should find in the general practitioner the best advocate of hospitals and the best friend of the members of the consulting staff. Instead of this harmony there is an ever deepening discord driving the different classes of the profession into opposing camps, as if hospital abuse did not rob the consultant as well as the general practitioner An exact illustration of such a situation was given at the meeting Dr MACNAUGHTON-JONES mentioned the case of a patient who visited a hospital and had almost matured arrangements for having an operation done there gratuitously when he was discovered to be a man of means and finally paid £100 for the operation Such a patient was not cheating the subscribers or the general practitioner so much as he was cheating the operator who was about to treat him as a poor patient But to judge from the general unwillingness of the hospital surgeons and physicians to assist in the exposure of these evils and their acquiescence in a system which is converting hospitals into improvident dispensaries or into medical relief offices for respectable classes of society it might be imagined that they belonged to a different profession from their brethren in general practice and were without regret for a system which demoralises the people and medical practice at the same time

We speak thus after seriously considering the significance of the meeting on Monday last Sir WILLIAM BROADBENT delivered a powerful speech in favour of the establishment of a real Central Board on which all interests should be fairly represented, in favour of a proper but sympathetic inquiry into the fitness of patients, and of a coördination of all sound medical charities in every neighbourhood No one who reads the speech or who knows Sir WILLIAM BROADBENT will doubt for a moment that he wishes to help the hospitals as well as to protect the members of his own profession from a most degrading and unfair competition Equally wise and magnanimous was his view of those funds which are now, taken singly, doing comparatively little to regulate and elevate hospital administration His desire is to see them powerful and prosperous, acting in coördination and not in competition He did not pretend that in the last year much progress had been made in realising the great ideal of a Central Hospital Board, truly representative of all interests, though he saw in the Central Hospital Council the first attempt at the creation of such a body Nothing could be better than Sir WILLIAM BROADBENT'S temperate and friendly speech, but what strikes us is that his peers in the profession were not present on this occasion and that the prospects of a Central Hospital Board and of a palpable reduction of the abuse of hospitals are just what they were 12 months ago It was obvious, as it has been in all such meetings, that the members of hospital staffs as a class have not yet perceived the harm they do by not organising a movement among themselves to induce the committees of hospitals to restrict the benefits of hospitals to really fit cases It may be hoped that the Central Hospital Council will soon justify its existence and show that it realises the evils which are stopping the flow of true charity and bringing the voluntary hospital system into danger Meanwhile the profession is being divided into hostile camps and the teachers and leaders of it are disappointing the men who are their own pupils and who look up to them for guidance and protection There is a grand opportunity for the Central Hospital Council to do a great service, but it must awake and take into its counsels others whose interest in hospitals is as real as its own It may thus initiate a new era of usefulness and prosperity for our great hospitals

Much was said at the meeting about the Funds—the

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to the Registrar of the General Medical Council that the man registered as EDWARD JOSEPH NUGENT was an impersonator but that nothing was done to revoke the registration or prevent further deception of the public until a rightful calamity had its outcome in penal servitude for the criminal Severe things were then said as to the supervision of the Council, but the critics were, to our thinking, not quite mindful of the difficulties of the Registrar's work. A man named EDWARD JOSEPH NUGENT had a right to a place on the Register until he died or did something which under the proper provisions of the Medical Act would enable the Council to remove his name. But we will admit that we are a little surprised to find the following entry in the new Medical Register, published only a fortnight ago —

Name, Edward Joseph Nugent, address, 38, Barking-road, Canning Town, London, E, date and place of registration, 1858, Sept. 15th, Ireland, qualifications, Lic. R. Coll Surg Irel., 1866, Lic. K Q Coll. Phys. Irel., 1872

It is known, and has been known for several months, that the man who practised in the neighbourhood of Canning Town, and whose present address is one of Her Majesty's prisons, was not NUGENT but BOWLAND, and also that NUGENT's address is somewhere in Australia. Taking these considerations with the sworn allegation that the real NUGENT on the eve of his departure from England handed over his diplomas to his impersonator in consideration of 3s 6d a week to be allowed to the wife whom he was deserting, we think a strong case is made out for the temporary exclusion of the entry from the Register pending any further proceedings deemed necessary, and we should like to hear the official reason for having acted otherwise

Annotations.

Ne quid nimis.

THE LAW AS TO CONSTRUCTIVE MURDER

MR. PITT-LEWIS, Q C, has contributed to the *Nineteenth Century* for May an article under the above heading in which he reviews the difficulties and discrepancies which have recently arisen in cases where death has followed illegal operations for the procurement of abortion and ends by indicating the nature of the measure which in his view would best put a stop to them. That the discrepancies exist no one will deny and the fact that the law as it stands does not commend itself to juries owing to its severity is not an unprecedented circumstance The same state of affairs arose when the capital sentence was pronounced for comparatively trifling crimes the jury acquitted guilty prisoners, or where they convicted commutation followed as a matter of course until an Act of Parliament more in accordance with the spirit of the age was passed. The Act now needed, according to the view of Mr Pitt-Lewis, should first "declare the law to be as it was laid down by Sir L. Foster by the late Mr Justice Blackburn, and by the late Chief Justice Cockburn and Baron Bramwell, and as the great majority of lawyers still believe it to be", that is, presumably that if a man in committing or attempting to commit a felony kills another he is guilty of murder A second section, he continues, should follow this one and enact that 'in cases coming within the first section of the Act the jury trying the case might append to their verdict a special finding to the effect that the accused, when he committed the act which led to the death of the deceased had reasonable ground for believing, and did, in fact, believe, that death would not result from such act, and that he used all reasonable skill, and all other means in his power to prevent its so resulting' The judge upon such special finding would be empowered to record the sentence of death instead of passing it in open court and to mitigate during the assizes such sentence of death to a term of penal servitude in his own discretion It must be said in favour of the second section of the Act suggested by Mr Pitt-Lewis that it appears to aim at interpreting the wishes of most of us better than the Bill introduced into Parliament by Mr Ambrose, Q C, and Sir Andrew Scoble This, it will be remembered, would meet the difficulty by enacting "that upon a trial for murder no constructive or implied malice shall be imputed to the accused merely because it is shown that he caused the death of the deceased by or in the course of the commission of or attempt to commit some other felony", and it has been suggested that if this were the law the man who with robbery as his object wrecked a train causing many deaths in so doing and the man who shooting at a man to murder him missed him but killed a stranger behind him would alike escape hanging, a consummation which few would desire On the other hand the special finding suggested by Mr Pitt-Lewis would be an exceedingly difficult one to base on any evidence which could conceivably be given, except perhaps by the prisoner, who is now a competent witness, while it seems to have been designed chiefly to meet cases of death through illegal operations rather than to deal with the question generally It was no doubt suggested by the interpretation of the existing law laid down by the Attorney General in the Collins case, to which most other lawyers have not assented, that "if the act done was not such as of necessity to cause danger if not unskilfully performed it was open to the jury to return a verdict of manslaughter" This is not in accordance with the opinion of Mr Justice Bigham, as Mr Pitt Lewis seems in one place to suggest, for that learned judge in trying Whitmarsh said that his act could only be manslaughter "if he could not as a reasonable man have contemplated that it would result in death," a very different thing Mr Pitt-Lewis, however, is a learned rather than a luminous writer, and his article, though interesting and suggestive is by no means easy to follow or to agree with in some of its passages

THE ELECTED AMERICAN FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND

THE admission by election of an American surgeon to the Fellowship of the Royal College of Surgeons of England at any time would be an interesting event. It is especially so at the present period when in the evolution of history a new recognition is being given everywhere to the essential alliance between England and the United States In no sphere is this more important or more seemly than in the serene atmosphere of science, and in no branch of science more than in that of medicine The professors of this branch on both sides of the Atlantic have long vied with each other in every demonstration of friendship and hospitality We offer our congratulations to Frederic Shepard Dennis M D, Professor of the Principles and Practice of Surgery in the Bellevue Hospital Medical College, &c., to whom the unprecedented honour, as an American Member of the College of 20 years' standing, of election to the Fellowship has fallen The election is not more honourable to Professor Dennis than it is creditable to the College. Few men combine the qualities and the merits

Hospital Sunday Fund, the Hospital Saturday Fund and the Prince of Wales's Fund, taking them in the order of their seniority Opinion is not unanimous as to the wisdom of preserving the individuality of all these Funds and as to the value of the principles upon which they are distributed. It would be calamitous if, as Lord METHUEN, the chairman of the meeting, seemed to think, the Funds were "treading on each other's toes" The two older Funds appeal in a convenient way to classes which clearly need to be appealed to annually in such a way The Prince of Wales's Fund is essentially a Jubilee fund and may with splendid effect be yet carried to its consummation within some definite period in connexion with the incomparable reign which it commemorates His Royal Highness the PRINCE OF WALES we are sure will rightly use his own sound judgment on this question What we are most concerned about now is to see the harmony of the profession restored on the question of hospital abuse and its natural leaders guiding the lay authorities of hospitals into sounder principles of hospital administration

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THE Medical Register is the most important manifestation of the work of the Medical Act of 1858 That Act, as we know, was passed in recognition of the obvious expediency "that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners," and to render such discrimination practically unfailing it provided for the maintenance of an official roll On the roll—the Medical Register, that is—were to appear the names of all duly qualified practitioners, so that if the public were in doubt about the status of any individual claiming to be a qualified medical man consultation of the roll would settle the matter at once It is clearly, therefore, essential to the purposes of the Medical Act of 1858, the Act by which our profession is ordered and under which the General Medical Council was created and does its work, that the Medical Register should be accurate, and should include the names of all duly qualified practitioners, their addresses, and the dates on which they obtained their qualifications—and no other names There is no part of the work of the General Medical Council in our opinion better worth doing thoroughly than the work which is directed towards maintaining the Register at a high level of accuracy

We may say at once that we regret our inability to consider the Medical Register for 1899 an accurate book of reference, though we have no reason to suppose that it is in any respect an inferior compilation to previous Registers We said last week that in as many minutes we were able to find the names of 21 dead persons on the Medical Register The importance of this fact lies in the wide door which is thus opened to the impersonator 16 of these deceased members of our profession resided in the colonies, and as long as their names appear on the Register it seems to us that any persons almost with impunity can practise in England on their credentials—for which reason we do not quote the entries in question though our information is at the service of the General Medical Council. It may be asked—How is the Registrar to obtain information of a practitioner's death? The deceased man cannot notify the sad occurrence himself and his relations probably never think it necessary to do so And for these very reasons it is our belief that the names of many more dead persons than we have been able to detect in a quick survey of the book are still printed in its pages. But the names of the 16 deceased colonial practitioners to which we have referred happen to be in the obituary of the Australasian Medical Directory for 1896, the dates of death ranging between the years 1892 and 1896, so that the information would not have been hard to come by We do not mean that the Registrar should accept as official the obituary list of the Australasian Medical Directory But Section XIV of the Medical Act of 1858 indicates the discretion that is allowed him in such matters Has the procedure under the Act been adopted? If so, either these gentlemen have replied to the Registrar, in which case the obituary list of the Australasian Medical Directory is fine imaginative literature, or they have not replied, in which case why do their names persist?

In the matters of addresses and qualifications the Medical Register of 1899, like its predecessors, is incorrect and incomplete Here the fault is clearly in the first instance on the side of the practitioners who do not keep the Registrar adequately informed on these points The Registrar prints yearly "Important Notices" at the beginning of the Register urging on practitioners the duty of giving immediate notice to the Branch Registrar by whom they were registered of any changes in their addresses, and the advisability of registering their full qualifications But his words go unheeded This being so we think that the Council are to blame now for their leniency towards the indifference of the profession For many years medical men agitated for an authoritative or official list that the public might find on it the correct names and styles of all persons duly instructed in the healing arts, and might no longer have an excuse for recourse to quacks, yet now that the machinery exists for the compilation and publication of the list many medical men take no steps to have their names correctly entered upon it. We recommend the penalisation of the indifferent A systematic comparison of the Medical Register with CHURCHILL'S excellent Directory would indicate a large proportion of the offenders, so that we are not suggesting any such extravagant proposal as the immediate issue of 30,000 registered letters The persons whose addresses and descriptions are believed to be incorrect could all be written to in the course of the next three months and the information gained from their replies would in our opinion considerably enhance the value of the Register

To one other matter we wish to refer The startling revelations made at the trial of JULIAN ROWLAND[1] for the manslaughter of a woman named JANE ELIZABETH SMITH by his terrible neglect of her when in labour aroused feelings of uneasiness in the public as well as among the profession because of the impunity with which the man ROWLAND, an unqualified person, had been able to practise as a medical man under the name and style of EDWARD JOSEPH NUGENT a Licentiate of the Royal College of Physicians of Ireland resident in Australia It was stated in evidence at the trial that information had been given

[1] THE LANCET Jan. 21st, 1899

nurses Such assistance would be invaluable on the West Coast of Africa, for instance, there would probably always have to be a European nurse in charge, but trained native women would find a wide field of usefulness

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND

OWING to the fact that the President of the Royal College of Surgeons of England is elected annually on the second Thursday in July, while the members of Council are elected on the first Thursday, it is theoretically possible that the President might cease to be a member of the Council one week before he would cease to be President. To obviate this difficulty Section 2 of the Charter of the 15th Victoria enacts that the President under such circumstances shall remain a member of the Council for one year longer without re-election This year the term of office of the President (Sir William MacCormac, Bart, K C V O) as a member of Council comes to an end before his term of office as President and his membership of the Council will consequently be prolonged until July, 1900 It is interesting to recall the only other occasions on which this rule has come into operation They are three in number—viz, (1) Mr Thomas Wormald, President, 1865-66, did not retire from the Council till 1867, (2) Mr Richard Partridge, President 1866-67, did not retire till 1868, and (3) Mr Edward Cock, President 1869-70 did not retire until 1871 Each of the above gentlemen would have retired a year earlier in the course of ordinary rotation

CHILD LABOUR AND ITS HYGIENIC ASPECTS

THE problem of child labour in its hygienic aspects, to which attention was called in our columns a short time ago,[1] has now entered upon a more public and perhaps more important phase It was referred to and dealt with in some detail by Sir John Gorst, the Vice-President of the Council of Education, when submitting the Education Estimates, in his speech on April 28th last, and must invite the serious consideration of authorities on education and legislators as well as of the public generally Since attention was first drawn by Sir John Gorst to this subject in Parliament last year returns had been received from nearly all the 20,000 board schools of England and Wales in reply to inquiries issued from the Education Department. "They were painful and sickening returns," said the speaker, "casting a lurid light upon the social conditions of large classes of the population and propounding a difficult and complicated problem for Governments and Parliaments to ponder over" Thus of 144,000 children on the school books as full time scholars, 110,000 boys and 34,000 girls were engaged as labourers out of school hours for wages and profit. The great bulk of these were, as the returns showed, children of tender years and the labour that many of them were engaged in was excessive and beyond their powers Thus 6268 children were employed from 10 to 20 hours a week, 27,000 from 20 to 30 hours, 9778 from 30 to 40 hours, 2390 from 40 to 50 hours, and 730 worked over 50 hours a week. One little boy worked 23½ hours a week as an undertaker's assistant at the gruesome task of measuring corpses and received 1s a week for his labour A boy, aged six years, worked for 20 hours a week peeling onions at a weekly wage of 8d, another delivered milk for 28 hours a week and received 2s A girl under six years of age worked 35 hours a week as a milk-carrier for her parents, and another girl under six years of age worked 16 hours a week for 1d A nurse-girl (sic) under six years of age was employed 29 hours a week for 2l and her food. Others were employed in laundry work, basket-making, minding babies, &c The occupations for boys consisted of agricultural labour, in which 6115 were employed, selling newspapers in the streets, in which 15,182 were engaged, and odd jobs, including carrying dinners and rousing workmen early in the morning, which gave occupation to 19,263, while 76,173 were engaged in working in shops Some examples given by Sir John Gorst speak for themselves A boy, aged 10 years, worked as a farm labourer 72 hours a week for a wage of 3s, a boy, aged 12 years, was engaged in a druggist's shop in London 78 hours a week for a wage of 5s, another little labourer, aged 12 years, worked 87 hours a week for half a-crown, and a little girl worked 72 hours a week in a shop earning 2s a week A boy, aged 12 years, was a greengrocer's assistant and had to start from London at 2 30 A M on his duties, returning home about 9 30 A.M, when he went to school It is said of another boy that he rose between 3 A M and 4 A M every morning and started on his rounds at 4 30 A.M to waken 25 working men He returned from his rounds at 5 30 A M but did not go to bed, as he went out from 6 A.M to 9 A M selling or distributing newspapers After this he attended school, where he was described as a very regular boy in his attendance but often half asleep and unfit for receiving intellectual instruction The effects of this extra mural labour and these long hours have been pointed out already in our previous observations already alluded to "Probably some die as a direct result of the severity of the toil inflicted upon them during their early years, and certainly many more of them must become a permanent and heavy charge upon the public purse because of the physical incapacity resulting from the rigour of their early experiences." These are the grave words embodied in a report concerning these children which was laid before the School Board on Feb 16th last The inquiries made since then have but served to amplify and confirm this Sir John Gorst described the sufferings of these overworked and underfed children in passages which were genuinely eloquent and profoundly touching These little slaves were brought out one by one with every detail in their squalid and wretched lives as if under an electric light and the picture was one to haunt the memory for many a day after Proposals of various kinds have been made to obviate or mitigate this evil These boys and girls are destined to be the future parents of generations to come and it is well that they should be physically and mentally able and vigorous so that they may be the parents of healthy children The future of a large section of the community demands that their lives shall be made healthier and better It has been suggested that Parliament should prohibit child labour for children of school age. This, perhaps, is too drastic a proposal It might well come within the scope of county councils to frame by laws preventing the labour of, say, children under 12 years before 8 A M. and after 8 P M and to limit the total hours of labour per week to, say, not more than 20 hours But public opinion also must be educated before legislation can be enacted and in this as in so many other respects an enlightened public opinion will be a most important factor for good.

[1] THE LANCET, March 11th, 1899, p. 707

A NEW DEPARTURE IN HOSPITAL APPEALS

THE Board of Management of the National Hospital for the Paralysed and Epileptic, Queen square, Bloomsbury, have issued an appeal which, like the address in the Commination Service, is made up of a series of originally disconnected "texts" In this case they are utterances from the lips of various eminent men who have from time to time advocated the claims of the charity They are blended into one harmonious whole and should certainly help to enlist the sympathies of the charitable Another novel feature is a scheme to return to donors "unable to sacrifice present income but desirous to benefit

of an elected Fellow more than he does His personal devotion to surgery both as a teacher and a practitioner and the embodiment in him of all that completes our conception of a genial American gentleman point him out as worthy to receive the compliment paid to him by his College It is to this genial quality of his nature that he owes not only his large circle of friends in Great Britain and other European countries, but the fact that he has been able to associate with himself as editor so many distinguished compatriots in the compilation of his splendid "System of Surgery" written throughout by American surgeons

THE AFTER-CARE OF DISCHARGED PAUPER LUNATICS

No patients require more special aid and after care on leaving the institutions where they have had to remain under treatment and until recovery than the pauper insane The After-care Association for poor persons discharged recovered from asylums for the insane is the only charity of its kind in the United Kingdom and during the few years of its existence its scope and sphere of work and usefulness have steadily increased The annual report of the council of the association for the year ending Dec 31st, 1898, is a record of satisfactory progress The work undertaken by the society can never be expected to become very popular in the strict sense of the word, nor can its progress be judged by comparing it with other charities as its difficulties are very much greater—viz, in affording help to those poor people who have recovered from insanity and whose chances of a livelihood in a struggling age are greatly diminished if not altogether lost Thus, during the twelve months of 1898 there were 186 cases from different parts of the country before the council, as compared with 147 in the same period in 1897, and this is by far the largest number ever brought under the notice of the council in one year Of these 131 were women and 55 were men Convalescents have been assisted in such ways as past experience has shown to be best—viz, by being boarded out in cottages in the country, by finding occupation for them, or by grants of money, clothing, &c Some have been placed in domestic service, a procedure which requires much care and knowledge for its successful carrying out, as all employers have to be interviewed and the cases for placing out very judiciously selected, especially in the case of young females All are visited periodically by officers of the association and it speaks well for this branch of the association's labours that a very large majority of cases so placed out and helped to help themselves have retained their situations, while the failures during the year have been comparatively few The boarding-out of suitable convalescents in cottage homes in the country has been continued with much success These houses are mostly situated in the south of England and are inspected by the secretary before anyone is sent, and they are also visited from time to time by him at short intervals Last year the council of the association decided to send particulars of the work of the association to various boards of guardians in England and Wales requesting information regarding all patients discharged as recovered from public asylums to workhouses, so that inquiry might be made into those cases likely to be benefited by the After-care Association and it is gratifying to note from the readiness of several boards to give such information that success in this direction seems probable We note that among the unions which subscribe to the funds of the association are those of Clapham, Wandsworth, Fulham, and Paddington and that among the City Guilds, &c, which give donations towards it are the Worshipful Companies of Mercers, Fishmongers, Salters, Clothworkers, Skinners, Merchant Taylors, and Leathersellers Cases have been assisted from among the discharged patients of all the London County Asylums and of the various public asylums of Middlesex, Essex, Kent, Sussex, and other southern counties The scope of the association, however, goes further north and convalescents from Nottingham, Lancashire, &c, have also been recipients of its bounties A few concrete instances will serve to show the kind of work done for discharged paupers who have recovered from insanity Case 598—A young orphan girl discharged recovered from an asylum boarded out and trained for domestic service and a suitable situation subsequently found for her Case 589—A girl deserted by her parents for many years boarded out at the seaside after recovery from an attack of insanity and afterwards placed in a suitable situation Case 20—A lad who had been in an asylum since the age of seven years boarded out for several weeks and placed in a suitable situation Case 602—A man from a London asylum was assisted by the association to obtain rest and change and to recruit his mind and body and was afterwards taken back by his old employers Owing to increase of work since January, 1899, the council has been obliged to appoint a second lady visitor at a salary of £40 per annum so that the visiting and placing of female convalescents may be efficiently carried out The council earnestly appeals for additional help either in the way of personal service, funds, or otherwise. It is evident from the report that the work done—quiet and unobtrusive though it be—during the past year has been the most successful in its annals, but it needs the warm cooperation and assistance of officers and authorities of the various public and private asylums and boards of guardians of the poor throughout the country for its continued success Surely no charitable body deserves better than the one which helps recovered lunatics to live so that they may not relapse and lose their reason again, but may continue "clothed and in their right mind" The offices of the association are at Church House, Dean's Yard, Westminster, S W, and the address of the honorary secretary is Chaplain's House, Colney Hatch, N

THE COLONIAL NURSING INSTITUTION

IN a letter to the daily press Mrs Chamberlain asks permission to draw attention to the Colonial Nursing Association It was to supply the known want of any provision for good nursing in the colonies, and especially those which lie within the tropics, that the Colonial Nursing Association was formed in 1896 with a small fund, raised by private subscription, and with the intention of encouraging and organising the supply of trained nurses in cases where the localities had been unable to secure this provision The association carefully selects the nurses, pays their passage out, and guarantees their salary for a term of years. It arranges the conditions and terms of service and furnishes all information on the subject Wherever possible the expenses are provided locally, and the residents in the colonies are expected to pay for themselves as soon as the initial difficulties have been surmounted The movement has the cordial support of the authorities of the Colonial Office who have taken advantage of the organisation to provide nurses for Government institutions maintained in Hong Kong, Cyprus, Trinidad, Bahamas, the Gold Coast, Lagos, the Niger Protectorate, and other places, while the following colonies and settlements have been supplied through the agency of the association with nurses for private patients—viz, Mauritius, Perak, Selangor, East Griqualand, Cyprus, Ceylon, and Bangkok. Six other colonies have applied for aid and will be similarly supplied during the present year Money is wanted, but a sum not exceeding £5000 would be sufficient, in the opinion of the committee, to meet all wants Subscriptions will be received by the Honorary Treasurer, Colonial Nursing Association, Imperial Institute, London, W We hope that the association will not confine itself to sending out European nurses but will also endeavour to train up a school of native

l forms of incontinence and bestiality—and as long s such establishments as those of Wilson exist they will appen again But the eyes of the authorities are now open s well as those of the public, so that we may fairly hope hat massage houses will cease to constitute a blot on ondon civilisation and a danger to the innocent of the ommunity

THE PLAGUE IN HONG-KONG

A CORRESPONDENT writing on April 8th reports that for he week ending April 1st seven cases of plague had been otified in Hong Kong, all of which died No 9 health istrict was declared to be infected with plague on April 5th o that house-to-house visitation and cleansing might be roceeded with Plague is said to be spreading in Formosa oth in town and country The Japanese have the same ifficulty about securing reports of cases as we have Their edical men and nurses are said to be devoted in their truggle with the epidemic

THE YARROW CONVALESCENT HOME

THE Yarrow Convalescent Home at Broadstairs was established for the accommodation of children of middle-class people in reduced circumstances It can receive 50 girls and 50 boys who must not have recently suffered from any infectious or contagious disease, and must be between the ages of four and 16 years for girls and four and 14 years for boys The report for 1898, which has just been issued, shows that there has been a steady increase in the admissions of children each year since the opening of the home in August, 1895, the numbers being 661 for the 17 months ending December, 1896, rising to 601 for the 12 months ending December, 1897, and 947 for the 12 months ending December 1898. From May to August, 1898, there were only a few unoccupied places The report of the medical officer, Mr Frank Brightman, states that 929 children were discharged during 1898, of whom 647 were then quite well 69 were greatly benefited, and 193 were improved The average length of stay of each child was 27 days The London offices of the home are at 73A, Queen Victoria street, E C

THE DIAGNOSIS OF SPORADIC TRICHINOSIS

IN the *American Journal of the Medical Sciences* for March Dr Osler has drawn attention to the difficulty of diagnosis in sporadic trichinosis The symptoms may not be at all distinctive, a large proportion of the cases are no doubt overlooked The hog is more frequently infected with trichinæ in America than in Germany, but disease is less common because few persons eat raw or partially cooked pork During 20 years hospital practice Dr Osler has observed only five cases, and these in the last two and a half years In all gastro-intestinal symptoms were not marked at the onset and in only one were they at all severe All at the onset complained of irregular pains in the muscles, joints, and back Fever is the symptom most apt to lead to erroneous diagnosis It is accompanied by headache, stupor, and general symptoms of serious illness The diagnosis of typhoid fever is therefore suggested. It is strengthened by the diarrhœa In one case the temperature was very suggestive of typhoid fever Shortly after admission it reached 104° F, and the diurnal variations for three days were not more than 2 in spite of the spongings carried out under this belief Epistaxis was noted in two cases, and enlargement of the spleen in three Ehrlich's diazo-reaction was well marked on admission in three cases In one case there were two suspicious rose spots There are in trichinosis three features of great value in diagnosis While in typhoid fever aching of the back and limbs is by no means uncommon, special complaint of pain in the muscles is exceedingly rare But in trichinosis this may be slight and not attract attention In a severe case the swelling and hardness of the muscles, the extreme tenderness, and the position of flexion without redness or swelling of the joints are almost pathognomonic Early in typhoid fever these are never seen But later there may be swelling and tenderness of the muscles Dr Osler[1] has described such cases Œdema which in its most characteristic form is seen in the eyelids and over the eyebrows is of great value because of its early appearance. It was characteristic in four cases In the hands and feet it is more commonly seen late in the disease Œdema with slight erythema above the swollen tender muscles is very characteristic Leucocytosis and eosinophilia are important features It is only recently that the state of the blood has received attention Dr T R Brown[2] has found leucocytosis and great relative increase in the number of eosinophile cells In all cases this was observed and in some it suggested the diagnosis The question remains whether in other forms of infectious myositis the eosinophiles are greatly increased But such cases are extremely rare and if eosinophilia does occur the diagnosis can be made by examining a portion of the affected muscle

HOSPITAL ABUSE AT BRIGHTON

WE have on previous occasions called attention to the prevalence of hospital abuse at Brighton Therefore we are glad to see that by the printed report of the Brighton Committee of the Hospital Reform Association the evil complained of is gradually lessening The report in question, after referring to the remarks of our Special Commissioner and saying that his report "shows a state of affairs which should demand the immediate attention of all those who are in earnest in wishing to ameliorate the condition of our poorer neighbours and instil into their minds habits of independence and frugality," points out that in the year 1894 the medical staff of the West-street Lying in Institution attended 1240 cases, being over one-third of the total number of births in Brighton and Hove for that year In 1897, however, the figures had fallen to 955 and are still decreasing The reports for 1898 of the various hospitals and of the dispensary have also been published and all show a decrease in the number of extern cases. The local committee of the Hospital Reform Association urge upon the local charities to take up the work of reform and they state their opinion that if this were done the subscriptions received would be quite enough for the requirements of the institutions and the poorer classes would be really benefited The association seems to have met with some success and we can only hope that owing to its efforts the evils exposed by our Commissioner will soon be things of the past

THE LIVERPOOL SCHOOL OF TROPICAL DISEASES

ON April 22nd Lord Lister (as reported in THE LANCET of April 29th) formally opened a special ward of 12 beds (to be called the Samuel Henry Thompson Ward) at the Royal Southern Hospital at Liverpool, when it was pointed out that cases of tropical disease had been treated at that hospital ever since it had been founded The arrangements for teaching tropical diseases at Liverpool are now complete Major Ross has been engaged as special lecturer, Dr Annett as demonstrator, and Professor Boyce, the professor of pathology at University College, Liverpool, as pathologist It will be remembered that Lord Lister opened the laboratories in October last. The citizens of Liverpool must be warmly congratulated on the business-like manner in which the school has been founded and

[1] Studies in Typhoid Fever vol. ii. pp. 399–401.
[2] THE LANCET August 13th 1898, p. 419

the charity" annuities calculated at from 4 to 5½ per cent upon the amount of the gift Any sum from £50 upwards will be received upon these terms and a gift of £1000 will be considered to provide for the future endowment of a bed upon which the donor may at once bestow a name Instead of themselves receiving the annuity donors may nominate some other person as the recipient, and in this way provision may be made for dependents and others during their lives with an ultimate reversion of a substantial sum to the hospital Full information will be afforded by the director at the hospital We fancy that this scheme is altogether a new departure and perhaps some day, if successful, hospital subscriptions will become a recognised quotation on the Stock Exchange Whatever be the result the idea is ingenious

THE MERCERS COMPANY AND ST THOMAS'S HOSPITAL

ON May 4th the Lord Mayor, accompanied by the Lady Mayoress, the Sheriffs, and the principal civic officials, paid a state visit to St Thomas's Hospital and opened a new ward with 20 beds, one half of which bear the name of the Mercers' Company who have provided £10,000 for their endowment. By such liberal use of wealth our hospitals might all be made free of debt and enabled to do all which the really needful cases of the metropolis require without converting them into pauperising agencies

INFANTILE PARALYSIS AN INFECTIOUS DISEASE

THE etiology of infantile paralysis is still obscure Some observers have been led to regard it as an infectious disease, though definite evidence of this has been scanty The occurrence of "family cases" and the simultaneous occurrence of the disease in many neighbouring households have been referred to by some authors Instances of epidemics of infantile paralysis have been recorded by Colmer,[1] Cordier,[2] Leegard,[3] Medin,[4] and Caverley,[5] while examples of its occurrence in families have been noted by Strümpell (two sisters), Hammond (two brothers), Meyer (twin brothers, after measles), and Simon (three cases in one family, two being attacked one day and the third the next day) On the other hand, Gowers says nothing as to its endemic or epidemic occurrence and states that the influence of heredity in the etiology of the disease is slight In the *Journal of Nervous and Mental Disease* (April, 1899) Dr Frederick A Packhard of Philadelphia records the following instance of the occurrence of infantile paralysis simultaneously in brother and sister S and H G——, aged respectively two and a half and one and a half years, were admitted to the Children's Hospital, Philadelphia, on Nov 29th 1898 Four weeks before admission they had both been exposed to bad weather and seemed to have "caught a cold" at the same time They were members of an apparently healthy family The older child, S, had always been well and strong except for an attack of cholera infantum when a baby, and seemed to be perfectly well until the exposure and the "cold" above mentioned For a few days at the outset of his illness the appetite was poor and there was a slight fever, and three days later he was found to be unable to move his left leg No other portion of the body was affected, and there was no evidence of constitutional disturbance On admission he was found to be well nourished, with a head of decidedly square shape and a muddy complexion The pupils were equal and normal, the tongue was protruded straight, and the face was symmetrical There was some evidence of rickets in the form of a slight enlargement of the epiphyses and a slightly developed rachitic rosary The upper limbs and the right lower limb seemed normal in appearance, their deep reflexes were found unaltered and the limbs could be moved voluntarily The left lower limb was soft and flabby, its temperature was lower than that of the right leg, its knee-jerk was abolished, and it was never moved voluntarily On the patient standing up with support the left leg remained limp and flaccid, it would not support the body and was swung forward only to a slight degree by the aid of the muscles of the trunk. The response to the faradaic current was almost nil in the paralysed leg The other patient, H, had also enjoyed previous good health until her present trouble began The present illness commenced with a "cold" and fever following exposure as in the preceding case Three days after the exposure, a few hours after her brother's palsy was noticed, she was found to be unable to move her right arm The palsy of the arm remained complete from the outset and without involvement of any other part of the body On admission she was found to have the same square shaped head and muddy complexion as her brother The pupils were equal and normal, the face was symmetrical, and the tongue was normally protruded. There were similar evidences of rickets in the epiphyses and ribs as in the case of her brother The right arm was motionless and limp, its muscles were soft and flabby, and there was an evident diminution in bulk of the deltoid muscle Response to the faradaic current was very feeble, especially in the triceps and deltoid The conditions under which the disease had its onset in both these cases and the simultaneity of its occurrence in the two patients, its febrile character and the supervention of paralysis after three days from the onset of the symptoms, and the occurrence of endemics under the observations of others as recorded above, all point to the fact that the disease is an infectious one The absence in the present cases of dietary indiscretion and of other phenomena of intoxication also indicate that its origin is not to be sought in toxins derived from the alimentary canal F Schultze[6] has recently reported a case of acute spinal paralysis of sudden onset with palsy involving both arms 13 days after the onset lumbar puncture was performed and the fluid obtained was found to contain the Weichselbaum Jäger meningococcus It is believed from this and from the other circumstances above mentioned that the infectious origin of infantile paralysis is rendered highly probable

THE MASSAGE SCANDALS

THE sentence of 12 months' hard labour passed at the London sessions on the man Thomas William Hill Wilson for keeping massage houses as brothels in Jermyn street and Portland street, although termed by Mr McConnell, Q C, the chairman, an "unusual" one, does not in our estimation appear very severe The fellow, who had an ill record, was making a large income out of the earnings of prostitutes and was also masquerading as a physician, publishing himself abroad as "Dr Wilson," and obtaining patronage for his brothels by giving details in his advertisements of the genuine medical attentions to be obtained in them The fact that respectable persons may have been deceived by his representations and either lured to sin or blackmailed in return for their credulity forms another reason for an opinion that Wilson's sentence of a year's hard labour does not err on the side of rigour These things are known to have happened—their possibility, by the way, was pointed out in the medical press some years ago when the word "massage" was not a cover for

[1] American Journal of American Science 1843, p. 248.
[2] Lyon Medical Jan. 1st 1888.
[3] Neurologisches Centralblatt 1890, p 760
[4] Verhandlungen des Zehnten International Medicinischen Congresses, August 7th 1890
[5] New York Medical Record, Dec. 1st, 1894
[6] Münchener Medicinische Wochenschrift, Sept 20th, 1898

berculous nodules In all the animals the tubercle bacillus as demonstrated in the lesions The placenta of the fœtal lf was unfortunately not preserved for examination. A post-ortem examination was ultimately held on the mother and e uterus was shown to be free from tuberculous lesions he disease was confined to the lungs and the lymph glands of e mesentery The case was therefore a good example of etal tuberculosis Very few instances of this nature have een published Among the lower animals, if we except the xperimental work, Dr Ravenel has only been able to find xamples amongst calves In only 17 fœtuses have tubercu-ous lesions been found and in only 12 of these has the ubercle bacillus been demonstrated. To these should be dded one stillborn calf and 17 calves under five days old in hich the tubercle bacillus was found

TRAUMATIC MENINGOCELE IN INFANTS

A CASE recently shown by M Kirmisson at a meeting of the Société de Pédiatrie in Paris and reported in the *Journal de Clinique et de Thérapeutique Infantiles* of April 27th is interesting in connexion with the etiology of meningocele The patient, an infant, aged 10 months, was born hydrocephalic, but the meningeal expansion which occupied the site of the left parietal eminence did not appear till the third month of life after a fall on the head M Kirmisson had had another such case which was also attributed to an injury sustained six weeks previously to the appearance of the swelling M Lannelongue at the same meeting mentioned several examples of this malformation which had come under his notice and in which the occurrence of a fall with subsequent injury to the parietal bone appeared to him to justify the traumatic theory of causation At the same time he admitted that hydrocephalus had a predisposing influence.

YELLOW FEVER IN CUBA

MEETINGS of Cuban medical men have recently been held in Havana for the purpose of laying before Dr O'Reilly, the head of the American sanitary service in that city, their views on the subject of yellow fever according to a series of questions which had been previously drawn up and circulated. The replies of Dr Fuentes, which may probably be taken as typical, are published by the *Archivos de la Policlinica* He does not appear to be enthusiastic regarding the so-called Sternberg treatment which consists in attempts to render the digestive canal antiseptic and to keep its contents alkaline by means of the administration of minute doses of perchloride of mercury with large quantities of bicarbonate of soda,[1] other antiseptics, such as naphthol, salol, and benzo-naphthol being equally good adjuncts to the bicarbonate of soda With regard to his own principles of treatment, if he sees the patient within the first three days of the disease he prescribes 30 grains of ipecacuanha in two powders as an emetic, and six or eight hours after it has acted 15 grains of calomel combined with a similar quantity of jalap in two powders, one to be taken an hour after the other In this way the digestive canal is washed out and cleansed If persistent vomiting should occur the stomach is washed out and in order to clear out the intestine a soft rubber tube is introduced as far as possible and an intestinal douche of warm water or of a solution of bicarbonate of soda is administered In case the patient is not seen until after the third day and before the conclusion of the fifth the calomel and jalap powders only are given. Afterwards antiseptics—perchloride of mercury, salol, benzo-naphthol, or naphthol—are prescribed, and, of course, milk diet is insisted upon until convalescence Regarding the question of mortality Dr Fuentes says it varies greatly, being sometimes below 15 per cent and at others as much as 60 per cent, generally speaking, it may be put down as 25 or 30 per cent. Persons not acclimatised should reside away from Havana, especially during their first year They should be very careful to avoid everything likely to irritate the digestive apparatus, and especially the liver, and to avoid all kinds of excess They should not take alcohol, except in great moderation, and should wear suitable clothing No over-ripe fruit or fruit not in season should be touched Bicarbonate of soda should be taken daily and a saline purge every two or three weeks. Exposure to the sun's rays for any length of time must be guarded against. Special caution is needed in the spring

[1] THE LANCET, August 16th, 1890, p. 349.

OPERATIVE INJURY OF THE THORACIC DUCT

INJURIES of the thoracic duct are rare The *Boston Medical and Surgical Journal* of April 13th, 1899, contains an interesting paper on the subject by Dr F B Lund. In most of the reported cases crushes of the chest and similar injuries were the causes, leakage of chyle into the pleura or abdomen producing chylous pleurisy or chylous ascites In 1885 Kirchner collected 17 cases in which only one patient recovered Injuries of the duct in the neck were usually to be associated with injuries of the great vessels and were generally fatal, but in recent years, since the complete operation for cancer of the breast has been the rule, in a large number of cases the subclavian triangle has been dissected In operations on the left side the duct has been injured in a moderate number of cases Cushing, in the *Annals of Surgery* for June, 1898, has reported nine cases in which the thoracic duct was injured in operating for cancer of the breast or in dissecting in the neck tuberculous or other glands Strange to say only one was fatal Two occurred in the Johns Hopkins Hospital—in one the duct was sutured, which prevented the leakage, in the other the leakage appeared several days after the operation, the wound having healed by first intention A tumour appeared in the wound and on incision yielded a milky fluid which poured out for several days but was stopped by gauze packing Of 35 cases in which the complete operation was performed on the left breast in the Johns Hopkins Hospital the thoracic duct was injured in two Why do such injuries heal so well? Possibly the duct is not completely cut off but only wounded, so that healing naturally occurs Also a not infrequent abnormality is that the duct is double near its outlet, so that one division may allow for a time profuse leakage, later the chyle may pass by the other Finally, Cushing suggests that the lymph may ultimately be taken up by the right thoracic duct He advises when the left subclavian triangle is dissected to tie all lymphatics If the thoracic duct is wounded a provisional ligature is to be placed round it and an attempt made to control the leakage by packing If the packing is unsuccessful the provisional ligature is to be tied and the duct occluded in the hope that by an anomalous branch or by diversion of the current to the right subclavian vein a collateral circulation will be established As to the dangers of closing the thoracic duct Sir Astley Cooper found that in dogs sudden occlusion was always fatal In cases in which there has been pressure on the duct by tumours a varicose condition below the point of pressure, chylous ascites, chylous pleurisy, and other untoward results have followed. In the light of the reported cases Dr Lund would wait very long before attempting to close the duct He would prefer to let it leak on the chance, which is very great, that it will heal rather than tie a provisional ligature He relates a case of cancer of the breast in which a very large number of discrete enlarged glands surrounded the axillary vein and extended

its connexion with University College is an especially wise proceeding At the inaugural dinner in the evening Lord Lister expressed his sympathy with the feeling at Liverpool that it would be a hardship if men who had studied at Liverpool under the best conceivable conditions which could exist in the British Isles should be compelled to go to London to study there Such an arrangement would act most prejudicially to the Liverpool School, as it would naturally occur to most men that they might as well go to London at once We are pleased that Lord Lister spoke so plainly on this subject and have no doubt that Mr Chamberlain will give every consideration to these views now that they have been expressed by such a distinguished representative of our profession As we have repeatedly pointed out, the variety of tropical diseases at the Seamen's Branch Hospital at the Albert Docks is not nearly so large as it is generally supposed to be Lord Lister also said that he was commissioned by Mr Chamberlain to say that the proposed compulsory arrangement was only made for a single year, and that when the year had expired he would reconsider the question. Like Lord Lister, we feel confident that at the expiration of a year, this requirement will no longer be insisted on by Mr Chamberlain

LUCCHENI REDIVIVUS.

WHEN in these columns[1] we took formal leave of the assassin of the Empress of Austria we dwelt on the megalomania which had proved to be the determining motive of his crime "Withdrawn from the public gaze and the gratification he drew from this position" we saw him "collapse at once into the 'hysterico epileptoid imbecile' of the criminal anthropologist"—all his revolting cynicism and defiant self sufficiency gone, reduced, indeed to the morbid type of degenerate humanity which he so strikingly represented Twice since then he has attempted, in sheer *taedium vitae*, to commit suicide and has had in consequence to be more vigilantly watched lest by carrying out this purpose he might baffle for ever the efforts of the authorities to ascertain whether he committed the murder *proprio motu* or was simply the agent of an anarchist plot Within the last few days, however, his moral condition has undergone a change confirmatory, in a significant degree, of the diagnosis which found vanity or megalomania at the root of his crime. The Cantonal Juge d'Instruction, in pursuance of the attempt above indicated to ascertain his possible complicity with others, visited him in his cell and approached the subject with what seemed to himself due dexterity or caution At once the previously downcast and abject creature brightened up, his eyes sparkling with gratified self importance "I giornali riparlano di me?" ("So the journals are talking of me again? ') he exclaimed interrogatively, and then the judge was aware that he had erred, as in Scott's great romance Mr Sharpitlaw erred when, in trying to get out of Madge Wildfire the knowledge she possessed of the ringleader of the Porteous Mob and his hiding place, he inadvertently touched the spring of vanity and put the cunning half witted creature on her guard There was, however, no receding from the step which he had incautiously taken and he disclosed the object of his visit Luccheni thereupon, just like his counterpart in the "Heart of Midlothian," dallied with his interlocutor, smiling at his reminiscences of the crime, assuming airs of reticence, even indulging in self contradiction to tease, if not torment, his judicial antagonist One admission, however, he dropped in this improvised fencing match—an admission which he could not be induced to make on his trial—he really had accomplices in the preliminaries leading up to the assassination But at this point his memory suddenly failed, he confessed that these accomplices were two in number but their names or their "ubicazione" (whereabouts as to origin or habitual residence) he could not recall Now, it appears that a few minutes before he committed the crime an elderly man with a full white beard was seen in his company on the Quai du Mont Blanc, that this individual pointed out his victim to him and thereafter was lost sight of, having cleverly divested himself (doubtless) of his hoary "hirsute appendage" and other disguises Nothing more, we understand, was elicited by the judge at the visit referred to, but (for us at least) the point of present interest is the confirmation of the assassin's megalomania and the prescriptions which such a diagnosis suggests in dealing with others of his type "Vanity being in most cases their guiding motive they should, under every legal safeguard and formality be brought to justice in private and be visited with its severest penalty in private likewise." We have said before—and we repeat it now—that medico-psychology must reinforce the civil law to a greater extent than it has hitherto been allowed to do if justice is to meet the anarchist assassin on equal or effective terms An admonition in this sense was given at the International Congress of Criminal Anthropology held at Geneva in the September of 1896, but it was treated, with scant respect, by the jurists who represented Russia, Germany, and France particularly, as a "fad" of the Subalpine Medical School Two years afterwards, almost to a day, the Empress of Austria's murder near the very spot where the congress met gave that school its "sombre *revanche*" Let us hope that the meeting of the same congress at The Hague in August next will reveal the "juridical mind" as less impervious to the experience of the sister profession on a subject that demands the serious and sympathetic cooperation of both

[1] THE LANCET Dec. 10th, 1898, p. 1564

FATAL TUBERCULOSIS IN A CALF

IN the Proceedings of the Pathological Society of Philadelphia, New Series, Vol II, No 6, is an interesting paper by Dr M P Ravenel entitled "A Case of Fatal Tuberculosis in a Calf" The writer very rightly points out that cases of congenital tuberculosis are rare enough to have more than a passing interest, and though this method of transmission occurs so seldom that it may practically be excluded from our calculations in considering the spread of the disease each undoubted case is instructive and worthy of record The case which came under the notice of Dr Ravenel is as follows During the latter part of 1898 a cow well advanced in tuberculosis was sent to the Veterinary Department of the University of Pennsylvania On Dec 23rd, 1898, without any assignable reason, she aborted, the fœtus being about seven months old A careful examination was made and, so far as gross changes were concerned, nothing abnormal was found except in the liver, on which were seen two whitish nodules of about one sixteenth of an inch in diameter These suggested a tuberculous origin, though much doubt was felt as to their nature They were removed and crushed in a sterile mortar and emulsified With the emulsion three guinea pigs were inoculated, two by the intraperitoneal method and one subcutaneously One of these guinea pigs died on Feb 6th, 1899, the second on Feb 16th, and the third, inoculated subcutaneously, was killed by chloroform on Feb 22nd, 1899 The first two showed general tuberculosis of the abdominal organs with involvement of the inguinal and lumbar glands The lungs were not affected The third guinea-pig had an abscess at the point of inoculation of about the size of a filbert, filled with caseous material There was a general tuberculous adenitis, with caseous changes in many of the glands The lungs, liver, spleen, and omentum showed marked signs of tubercle, and a portion of the peritoneum, about one and a half inches long by three-quarters of an inch wide, was studded with

there was also pain in the sacrum. There were no physical signs Lateral compression of the pelvis increased the pain Rest in bed, antipyrin, and turpentine embrocations were prescribed The patient rapidly improved and returned to work in a week. But the pain had not completely disappeared and was re-awakened by pressure on the joint and by movements There were also radiated pains which extended to the popliteal space, they manifested themselves when he stooped, sat down, knelt, or turned his foot to the left If he sat for long he had pain on getting up At the internal part of the left buttock a small ecchymosis was discovered A month later there was no sacro-iliac tenderness but the patient complained of weakness in the lower limbs and of pain in the posterior parts of the thighs where there appeared to be some paresis of the muscles A week later he could stand and walk without pain. Dr Galliard thought that in addition to the sacro-iliac sprain there had been traction on some branches of the sacral plexus, a complication which had not been described by Dr Deshayes

A MEDICAL HERO

HEROISM is not, we are glad to say, uncommon, and very possibly the most heroic deeds are those of which the least is heard Golden deeds are done in various fields—in battle, in shipwreck, in civil life, in plague-stricken cities, and in the sick room. As striking an instance as any recently reported came out owing to the application of a lady to "presume the death" of her father as having been lost in the *Stella* She and her father were standing on the deck and her father made an appeal to some passengers in a boat to make room for his daughter One man promptly climbed back on to the sinking ship and went down with her No one knows his name, but his example will surely never be lost sight of There was not much romance and no excitement in this act to make it more easy for the unknown to risk his life And this "accident" of non romance and want of excitement is often specially notable in deeds of medical heroism. Such acts are generally concerned with circumstances which to the lay mind would be positively repulsive and which even to the trained professional man are, to say the least of it, unpleasant On May 3rd a man named John Menzies of Sunderland swallowed some phosphorus paste in some beer The police were informed and Mr R. J Burns was sent for and came armed with a stomach pump The pump however, was unfortunately out of order and so Mr Burns passed the tube and acted as a pump himself—i.e, he sucked the poisonous contents of Menzies's stomach through the tube with his own mouth Menzies recovered temporarily but has since died and Mr Burns suffered from marked symptoms of phosphorus poisoning but is now better A more unpleasant or repulsive thing to do we can scarcely conceive and the members of our profession may well be proud of numbering Mr Burns among their number

THE TREATMENT OF OPHTHALMIA NEONATORUM

THE interest which is associated with the purulent ophthalmia of infants in the minds of most practitioners is not likely soon to die out. It is true that its cause and effects as well as the principles of its treatment, are generally well understood, nevertheless, the subject still possesses in its clinical aspect something even of the attraction of novelty The reason for this is, no doubt, to be found in the fact that method in management and the personal quality which develops this have much to do with the course and issue of the disease It is mainly this fact that impresses the reader of a paper published by M Kalt in the *Journal de Clinique et de Therapeutique Infantiles* of April 27th. The writer believes in the well-established reputation of nitrate of silver as a local remedy while he regards with no favour the use of mercurial solutions What is of at least equal importance, he perceives the advantage of soothing applications such as the compress of boric water and of avoiding superfluous manipulation in applying the caustic The strength of this latter varies from 1 to 3 per cent of distilled water It is applied by M. Kalt on cotton-wool to the everted eyelids, but frequently also by means of a drop-tube. The use of the stronger solutions is followed as usual by washing with 5 per cent salt solution Instillation is a method less practised in purulent ophthalmia than it deserves to be It implies, of course, the use of weak lotions only and careful regulation of the frequency with which they are used, but it is of much service in the less advanced stages of the disease without corneal abrasion even where there is considerable purulent discharge It possesses, moreover, the advantage of obviating much manual interference with a tender and inflamed organ, and it may be employed by a mother or nurse under medical supervision Irrigation with very weak permanganate of potash or lime-water solution is freely employed by M Kalt, who goes further in this direction than most practitioners would care to follow him, bathing the affected conjunctiva by means of a special apparatus with three-quarters of a litre at a time In this part of his treatment he certainly errs, in our opinion, on the side of thoroughness

THE CONTROL OF THE MANUFACTURE OF MEAT PREPARATIONS

WE have been gratified to receive communications from several well known makers of meat extracts in which the views which we expressed in an annotation in THE LANCET of April 22nd as to the control of the manufacture of meat preparations are fully endorsed Indeed, we are glad to learn that in many factories a staff of practical chemists and food analysts is retained whose duty it is to test every batch of material by the best scientific methods "Any plan to supplement these self-imposed precautions," writes one firm to us, "by a State-controlled system of examination of food stuffs in general would not only meet with no opposition on the part of manufacturers of reputation but be welcomed as an official confirmation of their statements to the public and would stamp out the purveyors of unfit material." Nothing could be more satisfactory than this or could afford better assurance to the public It will be remembered that the recent prosecutions upon which we based our arguments for the necessity of control related to an incident in which it was shown that the purveyors of so-called "table delicacies" had a mass of putrid liver and offal on their premises, and the inference was irresistible But in justice to the respectable makers of meat extracts properly so called it should be stated that the fate of this rotten material would most probably have been paste in the form of what the manufacturers are pleased to call "table delicacies," perhaps as *paté de foie gras*, sausages, ham and chicken, or even bloater paste We do not believe that the true meat extracts on the English market are in any sense open to reproach. Good wholesome meat is plentiful and cheap enough and the manufacture of meat essences and extracts on a liberal scale is a benefit of no mean importance to the profession and to the community at large We still maintain that the Government should institute a system of control calculated to stamp out meat pastes or "table delicacies" having the vile origin which we have indicated, and to bring the productions of honest makers into the prominence which they deserve

THE house surgeons of St Thomas's Hospital who held office during the period in which Sir William Mac Cormac

up to the clavicle The omo-hyoid muscle was divided and the whole subclavian triangle, internal jugular vein, and subclavian arch were cleaned It was recognised that there was great danger of wounding the duct but there was no evidence of leakage On the second day after the operation there was pain in the neck and on the fourth day there was a tumour and milky fluid leaked between the stitches The wound was opened and packed with gauze After four days the leakage ceased Convalescence did not appear to have been affected

MENTAL NURSES

THE care of patients suffering from temporary or permanent mental disorders is frequently a source of anxiety to medical men, and the existence of institutions for the supply of male and female attendants especially trained to nurse such cases supplies a great want Many of the nursing institutions have on their staff nurses who have had the required training, but their number is limited Among the best conducted of the special institutions for the supply of mental nurses is the one known as the "Mental Nurses' Coöperation," the offices being situated at 1, New Quebec-street, Portman square All the nurses, male and female, have been specially trained to the requirements of mental patients Another favourable circumstance is that all the nurses are total abstainers, this being most important in cases of dipsomania where for obvious reasons it is an advantage that the attendant should take no form of alcohol Especially is this the case in travelling appointments where temptations to indulge in the prohibited beverages are particularly numerous It is also useful to the practitioner to know where a capable attendant can be at once procured in cases of acute mania so that skilled treatment can be promptly applied until, should it be necessary, the patient has to be removed to an asylum, and another condition in which such training is essential is that of delirium tremens occurring in the well to-do where home treatment can be carried out

ARSENIC IN WOOL

THE question has been raised more than once in these columns as to the maximum quantity of arsenic which might be permitted in a given area of woollen material without injury to health The occurrence of arsenic in undyed wool in very minute quantities is referable, not to any process of manufacture but to the fact that sheep require to be dipped in arsenical wash in order to destroy "tick" Other washes free from arsenic are also employed but their effect does not appear to be so satisfactory, for in addition to effectually destroying parasites an arsenical dip improves the fleece Unfortunately it is impossible by several scourings and by other processes with which the elaboration of wool is concerned to remove absolutely the arsenic It appears to adhere most tenaciously to the fabric and since it resists all attempts at extraction by ordinary means the probability is that the minute trace of arsenic thus left in the wool does not lead to injury to health The fact that the arsenic is held so closely would seem to indicate that a compound is formed which is quite insoluble in which, therefore, the arsenic has been probably rendered non injurious It is, indeed, not improbable that the trace which occurs is combined with the sulphur of the wool, and sulphide of arsenic is innocuous Wool is said to consist chiefly of an albuminoid sulphur-containing substance termed keratin, and it is not unreasonable to suppose that the residual trace of arsenic contained in wool after the most drastic washing is the insoluble compound of arsenic with sulphur If such be the case there can be little objection to this excessively minute trace which can only be discovered by an exceedingly delicate chemical analysis In Sweden there is a law against the sale of woollen fabrics containing arsenic in any quantity beyond a minute trace The question remains, What is a minute trace? The limit fixed is 0 0009 per cent On one occasion a carpet was condemned because it contained one-thousandth part of a grain of arsenic in 16 square inches. It is difficult to conclude that such a minute trace of arsenic could cause any harm, especially as it most likely exists, as we have just pointed out, in an insoluble and not easily volatilised form It can hardly be concluded that a minute trace of arsenic which resists all attempts at extraction by powerful scouring processes can give rise to injury to health The question is an important one and one which has given rise to considerable trouble in the English woollen trade As far as we know no definite evidence has been forthcoming of injury having been caused by the occurrence of this residual trace of arsenic in wool Obviously some limit should be placed upon the amount and it seems to us that this could easily be arrived at by estimating the average amount of arsenic which remains in wool after repeated washing in strong extractive agents

"SMALL-POX AND VACCINATION"

IT is, we believe, an open secret that the masterly article on small pox and vaccination in the last number of the *Edinburgh Review* is from the able pen of Mrs. Garrett Anderson, M D Paris There is a peculiar appropriateness, both of time and authorship, in the appearance of this article, coming as it does so closely on the heels of a paper on the same subject in the March number of the *Contemporary Review* by Mrs Anderson's sister, Mrs Fawcett Rarely has so good an illustration of the natural sequence of the bane and its antidote been presented to an observant world And Mrs Anderson's article is the more welcome because, as we happen to know, the editor of the *Contemporary Review* when approached with an offer of a reply in his own columns to Mrs Fawcett's clever but insidious attack on vaccination expressed his regret that he was unable to find room for one It is some years since society was edified by the spectacle of the divergencies of two gifted brothers, John Henry and Francis Newman, who, like Corydon and Thyrsis in the eclogue, *cantare pares et respondere parati*, so well enforced the fact that community of birth and early training is quite consistent with marked discrepancy of intellectual convictions in later years And the two no less gifted sisters who have thus recently descended into the *certamen magnum* of the vaccination controversy, which has hitherto been left to the rude struggle of male athletes, we may hope will succeed in infusing into it a courtesy of thrust and parry to which it has been for the most part a stranger

SACRO-ILIAC SPRAIN

AT the meeting of the Société Médicale des Hôpitaux on March 10th Dr Galliard called attention to this form of sprain which is hardly recognised by surgeons It is usually accompanied by sprain of the symphysis pubis In 1896 Dr Deshayes of Orleans described six cases under the title of "pelvic sprain" A man, aged 31 years, in making an effort to lift a heavy cask felt an acute pain in the posterior part of the pelvis on the left side accompanied by a kind of crackling in the same region He fell down and had to be carried home On the following day he went to hospital and was cupped, the diagnosis evidently was lumbago He could walk only with great difficulty leaning on the arm of an attendant or on two sticks The pain was especially violent when he supported himself on his left leg He could not sit, in bed no position was comfortable and he could not sleep When examined on the fifth day the seat of pain was definitely localised in the left sacro-iliac joint, pressure on all accessible points of this joint produced acute pain,

to escape so that when the cooking and sterilising are completed and the cans have cooled down the ends of the can become concave This is done to satisfy the public who like to see concave ends when purchasing

It is well known that dishonest canned food dealers prick or unsolder cans which are "blown" or "springy" so as to allow of the escape of the gases produced by putrefaction which by pressure are causing the ends to become convex instead of concave and one is afraid that the steam blast is also used which may have the effect of stopping putrefactive changes for a time but the ptomaines would remain. A tinned can which has been bathed or steamed loses its lustre and is lacquered over where it will not be covered with a label for the purpose of improving its appearance or preserving it from decay

In the cans (they were all flat ones) of putrid lobster hich came into my hands there was not only the prick hole pon the top but under the label there were two or three pricks nd another one in the side immediately opposite these. he tins had been re-labelled, portions of the old label being istinctly seen. The defence stated that the re-labelling was ne to the cans coming from America and the old label eing taken off. It would be interesting to know whether uch is the universal practice The explanation of four oles upon the side was not at all satisfactory With ondensed milk and, I believe, with jams and syrups, ; is not absolutely necessary to have "soldering' nd "blow holes" In some well known brands neither 'soldering" nor "blow hole" is to be found. It would ppear that the reason for this is that milk, and also jams nd syrups, are already cooked and are poured hot into the an through a small aperture called the "stud hole" and orm a body in the tin leaving scarcely any air space and he can being hot the small stud is quickly and lightly oldered down and in many instances by the help of nachinery The soldering is lightly done because such ans have not to undergo pressure by any further cooking of their contents The sugar is a preservative in itself When the cans become cold they will as a matter of fact have concave ends The stud end of a can is generally made he bottom and the metal of the top end is fluted or beaded on the surface to strengthen it For the defence it was stated that a blown can of condensed milk after being pricked could not be resoldered, but several blown cans were produced which had been recently pricked and resoldered exceedingly cleverly by experts engaged by the prosecution

The question of how long foods hermetically sealed will keep was raised during the hearing of the summonses and whether the heat of a shop would not affect the contents of a can Dr Brown in his article states —"Fortunately, having had canned foods, including meats, soups, rabbits oysters &c. of from 20 to 30 years old, I found that the tins, though rusty outside, were perfectly good inside, none were blown." One of the experts for the prosecution told me that his firm had now canned meat quite good which had been through the Crimean War An expert stated in evidence that one plan adopted by his firm to test whether the sterilising process had been properly carried out and whether the contents of cans were good before sending them out was to place them in a heated room or chamber in order to see if the cans became blown.

The suggestion one would like to make is that no can should have more than one 'soldering point" and that that "point" should be either at the top or at the bottom of the can and should never be in such a position as to be liable to be covered by any label, and before leaving the factory a metallic plate with the name of the firm and the date of sending out should be soldered over the 'soldering point' With cans which are filled through stud holes and whether there be a soldering point or not the whole stud and soldering should be covered over with a plate as above Imported canned foods should have the names of the importers printed legibly on the label and such persons should be made answerable for the above requirements I quite agree with Dr Brown that "terne-plated" cans should be forbidden for all goods, but especially for fruits He suggests a non metallic coating for cans By "terne-plated is meant an alloy of lead and tin by which iron cans are plated

I must apologise for so lengthened a communication, but I thought that there might be some useful information to afford as canned foods are indeed 'cans of mysteries' and without opening cans those having the care of the public health cannot pass an opinion respecting the contents as cans which have been 'blown are 'doctored up'

LORD CROMER'S ANNUAL REPORT

WHEN Sir John Lubbock selected his Hundred Best Books there were not wanting critics to aver that the list could be improved upon, but we venture to say that no such difference of opinion is possible in the case of Viscount Cromer's century of Anglo-Egyptian Administrators In his last annual report to the Marquess of Salisbury Her Majesty's Agent in Egypt says —

"Without going into any elaborate analysis of the figures I may say that the rehabilitation of Egypt, in so far as it has been due to British influence since the occupation, has been carried out by a body of officials who certainly do not exceed 100 in number and might possibly, if the figures were rigorously examined, be stated somewhat lower"

It is surely not too much to add that never before in the history of the world have grander or more solid results been achieved by fewer workers So desperate, indeed, was the situation that Lord Cromer, whom no one can accuse of addiction to hyperbole, himself describes it in the following terms "It would be difficult to exaggerate the ruin which would have overtaken not only the population of Egypt but all who are interested in Egyptian affairs if the *régime* of the pre-reforming days had been allowed to continue in existence but a few years longer"

Lord Cromer's Hundred have wrought what is well-nigh a miracle, but, as his lordship points out, they "have been selected with the greatest care"

This year the report is divided into two parts the first—which occupies only seven or eight pages out of the whole 54—referring exclusively to the Soudan and the second to Egypt proper It was, of course, absolutely necessary that the Soudan should be reconquered, but if this had not been the case it might have been better for several urgent projects which for lack of funds must needs remain in abeyance The cost of the Soudan campaigns was £E.2 354,354 Last year the Egyptian Treasury had to make good a Soudan deficit of £E 200,000, and in the estimates for the current twelvemonth a sum of £E 332,000 is set down for a similar purpose Egypt is not only a poor country, but she is also terribly hampered by debts and charges which are out of all proportion to her resources The gross revenue for 1898 was £E.11,348,000, or nearly a million sterling in excess of the estimate, but after deductions on account of tribute to Turkey, interest to bondholders, and other unprofitable but preferential payments, "the real out-of pocket expenditure for administering Egypt and the Soudan is about £E 3,750,000" Under these circumstances, with only between 30 and 35 per cent. of income available, it is no wonder that Cairo and Alexandria should remain practically unsewered and that amongst a thousand other sanitary requirements almost as important such a thing as a pure water supply should be unknown throughout the country even in the great provincial towns with from 20 000 to 40 000 inhabitants

That the Egyptian bondholders are entitled to the money they receive as interest cannot of course be disputed, the charge, although extremely onerous, is equitably unavoidable, but such is far from being the case with regard to that mentioned in the following passage which we feel confident no true Briton can read without a feeling of resentment "Broadly speaking, it is no exaggeration to say that internationalism imposes an extra charge of about £1,750,000 a year on the Egyptian treasury" With a fair share of this million and three-quarters sterling in addition to his present inadequate budget, what sanitary ameliorations could not the able and energetic Director General of the Sanitary Department be able to accomplish.

But notwithstanding crippled resources and the obstruction due to the capitulations a considerable amount of medical and sanitary work was accomplished during the year under report About 22 000 in patients were treated in the Government hospitals, being an increase of 1500 over 1897 and of about 10,000 over 1887 The number of dispensaries in the provinces rose to 46 and the income derived from them to £E.2800 These institutions date from 1887 when eight were opened as an experiment The successful vaccinations numbered 351,000 the lymph in nearly half the cases being provided by the new Vaccine Institute at Cairo In 1896 small pox caused 2475 admissions to hospital with 544 deaths, and the following year 2057 admissions and

was actively connected with the hospital and school will entertain him at a dinner to be given at the Café Royal on Wednesday, May 24th, in honour of his third year of tenure of the post of President of the Royal College of Surgeons of England The whole number of past house surgeons of the period amounts to 130, of these 13 are dead and 20 are in various parts of the world abroad Of the remainder scattered over the United Kingdom it is hoped that all will be present, as coöperation in the scheme has been practically unanimous The chair will be taken by Mr G C Franklin of Leicester as the senior house surgeon on the list

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THE following 15 candidates are recommended for election into the Royal Society —Professor William F Barrett, Mr Charles Booth, D Sc, Major David Bruce, R A M C, Mr Henry John Horstman Fenton, M A, Mr James Sykes Gamble, M A, Professor Alfred Cort Haddon, M A, Dr Henry Head, Professor Conwy Lloyd Morgan, F G S, Mr Clement Reid, F G S, Professor Henry Selby Hele Shaw, M Inst C E, Dr Ernest Henry Starling, Professor Henry William Lloyd Tanner, M A, Mr Richard Threlfall, M A, Mr Alfred E Tutton, B Sc, and Professor Bertram Coghill Alan Windle, M D Dub

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THE annual dinner of the Royal Institute of Public Health will be held in the Victoria Hall, Hotel Cecil, on Wednesday, June 7th, at 7 P M, when the Harben Gold Medal will be presented to Lord Lister A number of distinguished guests have accepted invitations to be present Tickets (1 guinea, inclusive of wine) are to be obtained from Mr Henry C Jones, honorary secretary of the institute, 197, High Holborn, W C

THE annual dinner of the Indian Medical Service will be held at the Hotel Cecil on Thursday, June 8th, at 7 45 P M, when Surgeon General Sir W Guyer Hunter, K C M G, Honorary Surgeon to the Queen, will preside Officers intending to be present should communicate at an early date with the Honorary Secretary, Mr P J Freyer, 46, Harley-street, W

AN inaugural dinner in aid of the foundation fund of the Medical Graduates' College and Polyclinic is announced to take place at the Trocadéro Restaurant, Piccadilly circus, on the evening of Wednesday, June 14th The chair will be taken by Sir John Lubbock

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H R H THE DUKE OF CAMBRIDGE will preside at a festival dinner in aid of the re building fund of the Alexandra Hospital for Children with Hip Disease, Queen square, Bloomsbury, at the Hotel Cecil on Tuesday, June 20th

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ON Thursday, May 18th, a brass tablet erected to the memory of the late Sir B W Richardson, formerly President of the British Medical Temperance Association, will be unveiled at the London Temperance Hospital

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THE Prince of Wales's Hospital Fund has received a donation of £5000 from Mrs Brydges Williams

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ROYAL INSTITUTION —A general monthly meeting of the members of the Royal Institution was held on May 8th, His Grace the Duke of Northumberland, President, presiding The following were elected members Mr A Cooper, F R C S Eng, Mr A W Porter, Mr S Stephenson, and Mr T Uzielli The special thanks of the members were returned to Mr Hugh Dewar for his donation of £200, to Mr Thomas H Sowerby for his donation of £5 5s, and to Mr John H Usmar for his donation of £50 to the Fund for the Promotion of Experimental Research at Low Temperatures

GARBAGE MONGERS

BY FREDERICK WILLIAM ALEXANDER, L R C P EDIN, M R C S ENG,
MEDICAL OFFICER OF HEALTH OF POPLAR AND BEOMLEY.

Canned Foods —The Significance of the "Soldering Points"—A Suggestion

ON account of the recent revelations and convictions in regard to canned foods it may be useful and interesting to the medical profession to understand something respecting the significance of the "soldering points" upon cans containing articles of food I know of no book explaining the subject and one cannot apply, for obvious reasons, to manufacturers for any such knowledge, so that anything learnt by attending at a police-court and chatting to experts and listening to them under examination and cross examination may benefit the community by being made generally known. In the Journal of the Sanitary Institute, April, 1898, there is an article upon "Poisoning by Canned Foods, Hints on its Prevention," by Dr J Brown, medical officer of health of Bacup which is well worth reading by everybody Dr Brown speaks of the plating of the cans, but he does not mention anything concerning the utility of the soldering points, although he does say "It has been stated that some American firms reseal blown tins The tins then have their former normal concave appearance again." Again, in hints to consumers he states "Cans doubly sealed by soldering are suspicious"

Articles of food which are to be canned as a rule are par boiled to allow for a certain amount of swelling before being put into the can, and as further cooking, with sterilising, is done whilst in the can it is essential for the soldering to be done strongly, and when fixing on the top of a can in order to seal it down it is necessary to have a hole in this piece of metal forming the top to allow of the escape of the expanded air and the steam generated by the soldering process, otherwise the solder will spit and will not flow properly to form a good and neat joint When the top has been soldered on and the prick hole shut with solder the can is placed in a water bath or a steaming apparatus The temperature being raised the contents expand and cause the cans to "blow," which means that the ends of the can become convex. The can is then taken out of the apparatus and the prick hole is unsoldered by the application of a hot iron, when about one cubic inch of heated air escapes The hole is soldered up afresh and the can put back again into the water bath or steaming apparatus and the sterilising and cooking processes completed In evidence it was pointed out that for blowing purposes during the bathing and steaming processes, instead of unsoldering the prick hole, some firms prefer making a second hole either at the side or at the other end of the can The reason one understands for this is that when cans are hot and their prick holes have been unsoldered and the contents are steaming out the holes cannot be soldered up again so neatly, hence the blow-hole is made at the other end, which is made the bottom of the can when labelled, or the hole is made on the side and is covered afterwards by the label.

In unsoldering or making a second hole to relieve pressure in order to create a vacuum, it may be necessary on account of the contents of a can having shifted and blocking up such a hole, and thereby preventing the air escaping, to make another hole with a "prod," which may account for more than one soldering point With some canned foods it will be noticed that inside the can immediately under the soldering point is a small metallic plate, the object of which is to obviate the necessity of making another hole as this plate prevents the contents of the can blocking up the soldering point which when unsoldered allows the can to blow so as to obtain a vacuum In the steaming apparatus on shelves certain foods are cooked in the cans with the blow-hole unsoldered, but when the water bath is used the cans are packed together and they are completely soldered down It was pointed out in evidence by an expert that the blow hole is not really necessary, but firms do this in the first or low heat stages of the bathing or steaming processes to allow an

THE STUDY OF TROPICAL MEDICINE

BETWEEN three and four hundred gentlemen attended a festival dinner of the Seamen's Hospital Society which was held in the Grand Hall of the Cecil Hotel on Wednesday evening last May 10th

The toasts of 'The Queen which was received with musical honours, and 'The Prince and Princess of Wales and the other members of the Royal Family" were proposed by the Right Hon. J CHAMBERLAIN, M.P, the chairman

The Marquis of LORNE proposed 'The Navy, Army, and Auxiliary Forces," which was replied to by Admiral Sir Anthony H. Hoskins and the Marquess of Lansdowne

The SECRETARY OF STATE FOR WAR, referring to the Royal Army Medical Corps, said that the army was a small one but its liabilities were immense. The most formidable foe that the British soldier had to encounter was tropical disease Lord Lansdowne reminded his hearers that in the Tirah campaign in round figures there were 1000 admissions to hospital from gunshot wounds and the injuries usually sustained during a campaign while there were 11 000 admissions from fever and dysentery Of the deaths there were 100 from wounds and injuries but nearly 600 from diseases of a tropical kind

Mr GARLAND SOPER, J P, proposed 'The Houses of Parliament"

Lord LOCH in responding, asked for support for the Colonial Nursing Association

Sir WILLIAM PRIESTLEY referred to Lord Lansdowne's interest in the Medical Department of the Army and remarked that his connexion with establishing the Royal Army Medical Corps had made him so popular with medical officers that there was a desire to have his portrait framed in every mess room where they were assembled.

In proposing "The Establishment of the London School of Tropical Medicine and the Enlargement of the Branch Hospital of the Society in the Royal Victoria and Albert Docks" Mr CHAMBERLAIN said that in the great work of civilisation our greatest enemy was the insidious attacks of a deadly disease which weakens where it does not kill and which shortens the lives and careers of the ablest and most energetic of those who go out to represent us in these countries The problem before us was manifold We had to seek out and make clear the history and origin of these diseases We had, if possible, to find a cure for them, and with those objects we had to extend the study of these tropical diseases, and to create, it may be, a school of trained practitioners and investigators, so that in future scientific research may go hand in hand with practical medicine. He referred to the aid which had been given by Lord Lister and the Royal Society to the work of Major Ross, I M.S in India and that of Dr Patrick Manson (medical adviser to the Colonial Office) and his predecessor (Sir Charles Gage Brown), and to that of Dr Rowell. Under the proposed scheme the accommodation at that hospital would be increased to 50 beds When this enlargement had taken place and the necessary buildings had been erected the course of procedure would be somewhat as follows The Colonial Office and the other offices which had dependencies in the tropics under their charge would give a preference in their selection of medical officers for those colonies and dependencies to the gentlemen who had gone through a course of special study in connexion with the subject of tropical diseases in one of the great medical institutions of the country This course of study might extend over two or three years and be given in any of the medical institutions of the United Kingdom. After that study had been completed and the necessary certificates and degrees had been conferred it would be expected of the candidates selected that they should take advantage of schools of tropical medicine and practically learn the treatment of those diseases Between the several institutions engaged in the same work there could be no question of jealousy and he hoped that they would always keep in close touch After referring to the advances which science had made in the control of disease he expressed his opinion that the man who should successfully grapple with this foe of humanity and find the cure for malaria and for the fevers desolating our colonies and dependencies in many tropical countries and should make the tropics liveable for white men would do more for the world, more for the British Empire, than the man who added a new province to the wide dominion of the Queen All those who coöperated in securing this result, whether by their personal service or by some pecuniary sacrifice, would be entitled to share the honour and to add their names to the golden record of the benefactors of mankind.

Lord LISTER proposed, and Lord STRATHCONA and Sir P O FYSH responded to the toast of "The Empire"

Sir DONALD CURRIE gave the toast of "The Health of the Chairman."

In the course of the evening subscriptions amounting to £15,600 were announced This sum included £3500 from the Colonial Office £2000 from the Bishop of London on behalf of the Marriott Bequest, £1000 from the India Office, £200 from the King of the Belgians, and £500 from Sir Thomas Sutherland Lord Strathcona and Sir Donald Currie each gave £500 to endow a bed, and Sir Henry Burdett has promised to give £300 a year for three years for a travelling scholarship

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD

On the Sanitary Circumstances and Administration of the St Dogmells Rural District, by Dr R. DEANE SWEETING — The Local Government Board, we learn from this report, are not on general grounds in favour of the division of sanitary districts amongst a plurality of medical officers of health and are directing special inquiry into the sanitary circumstances and administration of districts so divided In course of these inquiries inspection has been made of the rural district of St Dogmells in Pembrokeshire, an area of about 12 miles by 17 miles, comprising 17 parishes five of which lie along the coast-line of St George's Channel. This rural district has 2434 inhabited dwellings and its population at the last census was 9125 Its assessable value is £27 676 It is a hilly agricultural country, as a rule sparsely populated but with small quasi urban aggregations of population at St Dogmells, Cilgerran, Newport, and a few other villages Probably on account of its size and its hilly character the district has been subdivided for sanitary purposes, Dr Phillips of Cardigan being medical officer of health of one half, and Dr Havard of Newport the health officer of the other half Such advantages as this subdivision presents however, Dr Sweeting considers to be more than balanced by the difficulties in the way of joint action by the two health officers and by the smallness of the salary which the district council pays in each instance. The inspector recommends the appointment of a single medical officer of health who should be in closer relation with his authority than is at present the case, and remunerated on a scale which would permit frequent inspections of different parts of his district. From the account given of the sanitary circumstances and history of administration in St Dogmells the need for attention to public health matters there seems to be a pressing one, and it is to be hoped that the efforts of the single medical officer if appointed, will be more successful than those which have been made in vain by his two predecessors The housing of the poorer classes in the place appears often to be of a most wretched description. Small cottages some only of one room, badly dilapidated with floors of beaten earth below the level of the surrounding ground and without through ventilation appear to be common It is often difficult for a local authority to deal satisfactorily with houses of this sort, but it is at least in its power to see that new dwellings erected in the district comply with reasonable sanitary requirements But at St. Dogmells they have no building by laws and no plans of houses are ever submitted to the district council before they are erected Frequent opportunities of pollution of streams some of them sources of water supply appear to be afforded by the prevailing methods of sewage and excrement disposal Such drainage as there is in the several villages of the district consists merely of rubble drains discharging into neighbouring watercourses, and by means of these drains or otherwise the streams in the neighbourhood have in many cases become the common sewers of the district. Even accumulations of house refuse are at times got rid of by

487 deaths, but in 1898 the cases fell to 1379 and only 276 of them ended fatally "A new hospital was completed last year at Sohag and new hospitals are under construction at Assiout and Chibin el Kom" In addition to the above several other minor ameliorations are recorded, but Lord Cromer feels constrained to add in conclusion "In spite of the progress which has been made some of the provincial hospitals are, I regret to say, still in a very bad condition They will be taken in hand gradually as funds are available"

It is in connexion with the ordering of cemeteries and mosques that of late years the sanitary authorities in Egypt have been most successful In each case a complete, and happily also a silent, revolution has been most advantageously effected Formerly the people used to bury their dead at their doors, utterly regardless of the danger to the living, while the so-called purifying arrangements which were attached to most of their mosques were simply sinks of unutterable foulness For obvious reasons it was extremely difficult and even dangerous to attempt reform in either direction, but by dint of "great care and judgment" the most bigoted even of the Moslem community have been brought to admit the reasonableness of the proposed innovations Writing to Lord Cromer with reference to the mosques of Upper Egypt Sir John Rogers observes "It was remarkable to receive in many places—towns as well as villages—the expression of thanks from leading inhabitants for the sanitary improvement effected in the mosques The measure when first initiated was purely tentative and it was by securing the cordial coöperation of the native classes, official and private, and at the same time insisting on the necessity of sanitary reform, that success became assured The cost in all the villages has been borne by the community" No fewer than 94 mosques were purified during the year 1898, a vast gain to sanitation, while in the same space of time 118 cemeteries were transferred from dangerous to innoxious sites At first the opposition to the removal of cemeteries was very strong, but it is cheering to find that the initial cost was the main stumbling block "When once the new cemetery is completed and the initial cost paid the village inhabitants are the first to recognise the advantage conferred on them by having a decent cemetery at a suitable distance from their habitations"

Several other matters of interest to members of the medical profession are discussed by Lord Cromer in this admirable and exhaustive report, but any further remarks which we may have to offer must be deferred to a future occasion

THE PREVENTION OF TUBERCULOSIS

(Continued from p 1048)

LONDON

THE first statutory meeting of the National Association for the Prevention of Consumption and other Forms of Tuberculosis was held on May 4th at 20, Hanover square, W The Earl of Derby was in the chair Dr StClair Thomson read the report of the Organising Committee which showed that 1252 members had already been enrolled and there were 25 branches formed or in course of formation in the provinces Mr Malcolm Morris the treasurer, read the financial report which showed that the association could rely on a sum at the present moment of £1100 The Chairman moved the adoption of the financial report and also that 30 gentlemen recommended by the Organising Committee for election be elected as the first council of the association Sir William Broadbent said that it was hoped that before the next statutory meeting was held there would be a conference of representatives from all parts of the country Dr Clifford Allbutt, in moving a vote of thanks to the Organising Committee, suggested that it would be a good thing if chairs of comparative pathology were established The President of the Royal College of Physicians of London, Dr W S Church, said that the duty of the profession was to direct public interest to the movement against tuberculosis

A conference of delegates from various metropolitan boards of guardians was recently convened by the Union of St Saviour, Southwark, and met on April 20th at the offices of the City of London Guardians The conference was to consider the subject of tuberculosis Mr T Cooksey, of the parish of St Saviour, who was voted to the chair, said that the question of tuberculous patients in Poor law infirmaries was a most important one Large numbers of such patients were treated at the Poor law infirmaries, but with the existing accommodation it was impossible to treat them properly It remained to be seen whether the Poor law unions were sufficiently impressed with the gravity of the case to take common action whereby some improvement might be brought about Mr F Redman (St Saviour's) read a paper on Phthisis Patients under the Poor law and concluded by moving the following motion —

That, having regard to the large number of cases of tuberculous disease which find their way into establishments under the care of the Poor-law guardians and the danger of infection incurred by non-tuberculous patients it is desirable that special institutions should be established in the country to which all hopeful cases of tuberculous disease should be removed

This was seconded by Mr F J R lly of Mile-end. Mr. Lindow of Woolwich thought that they could treat cases of phthisis quite well in Poor law infirmaries provided the buildings were suitable Common lodging houses were centres of infection and something should be done either to reduce their number or to see that they were conducted under better conditions Dr Potter of Kensington said that out of 93 cases of phthisis admitted into Kensington Infirmary last year there were only 15 which could have been sent to a sanatorium He thought that a trial sanatorium for 200 selected cases might be provided After some further discussion Mr Redman agreed to modify his motion as follows —

That, having regard to the large number of cases of tuberculous disease which find their way into establishments under the care of the Poor law guardians it is desirable that the Local Government Board should make an exhaustive inquiry into the cause and treatment of the same.

This was carried unanimously

TUBERCULOSIS AND MUNICIPAL CORPORATIONS.

The corporations of Blackpool, Bootle, Derby, Darwen, Leeds, Manchester, Salford, and Stockport recently proposed some rules for the prevention of tuberculosis These rules were prepared by the Local Government Board and the Board of Agriculture and accepted by the council of the Central Chamber of Agriculture, with some exceptions, mainly arguing that the clauses ought not to apply to cows unless affected with tubercle of the udder A meeting of the Parliamentary Committee of the Central Chamber of Agriculture was held on April 18th, at which Mr W H. Long was present, and it was decided to withdraw opposition to the rules if they were limited in the above sense. The corporations accepted this compromise The most important clauses of the rules are Clause 2, which imposes a maximum penalty of £10 for the sale knowingly of milk from cows suffering from tuberculosis of the udder, Clause 3, imposing a maximum penalty of £5 upon a dairyman knowingly keeping a cow with a tuberculous udder with other cows in milk, Clause 4, rendering notification of cows suffering from, or suspected of, tubercle of the udder obligatory, and Clauses 5 and 6, providing for inspection of samples of milk and power to take the same and giving power to corporations to suspend a suspected milk supply

TROWBRIDGE

An important meeting was held at the George Hotel, Trowbridge, on April 22nd The object of the meeting was the formation of a West Wilts Branch of the National Society for the Prevention of Consumption and Other Forms of Tuberculosis Captain Chaloner, M P, was in the chair and there was a good attendance of medical practitioners and others Mr Murray Gray explained the objects of the association The branch was duly formed and the meeting proceeded to elect patrons and officers Among the patrons was Mr W H Long M P, the Minister of Agriculture. It was proposed to hold a public meeting shortly at which the Minister of Agriculture should be asked to preside

STOKE BY NAYLAND

An estate of 94 acres at Stoke-by Nayland in Suffolk has been purchased by a Yorkshire gentleman, Mr Walker of Dewsbury, with the object of erecting on it a large hospital for the treatment of phthisical patients Mr Walker's daughter, Dr Jane H Walker, will be the resident physician. This lady has already acquired considerable experience in this department of practice, having for the last eight years been at the head of a small sanatorium for tuberculous cases at Caius Farm Denver, in the county of Norfolk It was from observing the benefits obtained from the open air treatment of phthisis in Switzerland that Dr Jane Walker was induced to found in England an institution conducted on similar lines

which were referred to whooping cough, 16 to measles, ven to diarrhœa, five to diphtheria, three to scarlet fever, id two to "fever" In all, 52 deaths resulted from these incipal zymotic diseases, against 53 and 76 in the two eceding weeks. These 52 deaths were equal to an nual rate of 1 7 per 1000, which was slightly above e mean rate last week from the same diseases in the large English towns The fatal cases of whooping cough, hich had been 13 and 22 in the two preceding weeks, eclined again to 19 last week, of which eight occurred in dinburgh, five in Glasgow, and three in Aberdeen The eaths from measles, which had increased in the three receding weeks from 13 to 30, declined to 16 last week, of hich 14 were recorded in Glasgow The five fatal cases f diphtheria exceeded the number registered in any recent eek, and included two in Glasgow and two in Aberdeen he deaths from scarlet fever, which had been four and ve in the two preceding weeks, declined to three last week f which two occurred in Glasgow The deaths referred o diseases of the respiratory organs in these towns, which ad been 119 and 117 in the two preceding weeks, further eclined to 109 last week, and were 20 below the number in he corresponding period of last year The causes of 34, r more than 6 per cent, of the deaths in these eight towns ast week were not certified

HEALTH OF DUBLIN

The death rate in Dublin, which had declined in the hree preceding weeks from 33 4 to 29 7 per 1000, further fell o 24 8 during the week ending May 6th During the past our weeks the rate of mortality in the city has averaged 29·5 per 1000, the rate during the same period being 17 2 in London and 17 7 in Edinburgh. The 166 deaths registered in Dublin during the week under notice showed a decline of 33 from the number in the previous week, and included seven which were referred to the principal zymotic diseases, against 10 and 12 in the two preceding weeks, of these, four resulted from whooping cough, two from "fever," and one from diphtheria, but not one either from small-pox, measles, scarlet fever, or diarrhœa. These seven deaths were equal to an annual rate of 1 0 per 1000, the zymotic death rate during the same period being 1 5 in London and 1 6 in Edinburgh The fatal cases of whooping cough, which had been three and eight in the two preceding weeks, declined to four last week. The deaths referred to different forms of "fever," which had been two and three in the two preceding weeks, declined again to two last week. The mortality from diphtheria corresponded with that recorded in the preceding week. The 166 deaths registered in Dublin last week included 18 of infants under one year of age and 49 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons showed a marked decline from the numbers recorded in the preceding week Ten inquest cases and six deaths from violence were registered and 54, or nearly a third, of the deaths occurred in public institutions The causes of four, or more than 2 per cent., of the deaths in the city last week were not certified.

VITAL STATISTICS OF LONDON DURING APRIL, 1899

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality during April in each of the 43 sanitary areas of London With regard to the notified cases of infectious disease in the metropolis, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 6 2 per 1000 of the population, estimated at 4,546,752 persons in the middle of this year In the three preceding months the rates had been 9 2, 8 5 and 6 7 per 1000 respectively The rates were considerably below the average in Paddington, Hampstead, St Martin in the-Fields, Strand, Lee, and Plumstead, while they showed the largest excess in Westminster Clerkenwell, Bethnal Green, St Saviour Southwark, St George Southwark, Newington, and Greenwich sanitary areas Six cases of small pox were notified in London during April including two in Islington and one each in Marylebone, Whitechapel, Poplar, and Camberwell, two small pox patients were admitted into the Metropolitan Asylums Hospitals during April, and three remained under treatment at the end of last month The prevalence of scarlet fever in London showed a further decline from that recorded in the three preceding months, among the various sanitary areas this disease showed the highest proportional prevalence in Westminster, St Saviour Southwark, Rotherhithe, Wandsworth, Greenwich, and Plumstead The Metropolitan Asylum Hospitals contained 2088 scarlet fever patients at the end of April against 2637, 2535, and 2272 at the end of the three preceding months, the weekly admissions averaged 177, against 236 and 196 in the two preceding months The prevalence of diphtheria in London during April showed a further marked decline from that recorded in recent months, this disease was proportionally most prevalent in Clerkenwell, St. Saviour Southwark, St George Southwark, Newington, Bermondsey, Lambeth, Camberwell, and Greenwich sanitary areas There were 994 diphtheria patients under treatment in the Metropolitan Asylum Hospitals at the end of April, against 1358, 1388, and 1159 at the end of the three preceding months, the weekly admissions averaged 107, against 166, 172, and 127 in the three preceding months The prevalence of enteric fever in London showed a slight further decline from that recorded in recent months; among the various sanitary areas this disease showed the highest proportional prevalence in Holborn, St George-in-the-East, Limehouse, Poplar, and St. Saviour Southwark. The Metropolitan Asylum Hospitals contained 124 enteric fever patients at the end of April, against 249 215, and 148 at the end of the three preceding months, the weekly admissions averaged 17, against 27 and 19 in the two preceding months Erysipelas was proportionally most prevalent in Westminster, St Giles, Bethnal Green, Mile End Old Town, and Lambeth sanitary areas The 23 cases of puerperal fever notified in London during April included three in Hackney and two each in Kensington, Hammersmith, Chelsea, St Pancras, and Lambeth sanitary areas

The mortality statistics in the table relate to the deaths of persons actually belonging to the various sanitary areas of the metropolis, the deaths occurring in the institutions of London having been distributed among the various sanitary areas in which the patients had previously resided During the four weeks ending April 29th, the deaths of 6279 persons belonging to London were registered, equal to an annual rate of 18 0 per 1000, against 17 0, 20 3, and 22 2 in the three preceding months The lowest death rates in the various sanitary areas were 9 4 in St. Olave Southwark, 11 8 in St Martin in the Fields 13 1 in Battersea, 13 2 in Hampstead, 13 3 in Stoke Newington, and 13 6 in Lewisham (excluding Penge), the highest rates were 22 2 in Newington, 23 2 in Bermondsey, 24 4 in St. George in the-East 25 0 in St George Southwark, 25 5 in Holborn, 25 8 in St. Saviour Southwark, and 26 4 in Limehouse During the four weeks of April 565 deaths were referred to the principal zymotic diseases in London, of these, 159 resulted from measles, 27 from scarlet fever, 108 from diphtheria, 212 from whooping-cough, 27 from enteric fever, 32 from diarrhœa, and not one either from small pox, typhus, or from any ill-defined form of continued fever These 565 deaths were equal to an annual rate of 1 6 per 1000, against 1 5, 1 6, and 1 9 in the three preceding months No death from any of these zymotic diseases was recorded last month in Stoke Newington, in the other sanitary areas they caused the lowest death rates in Paddington, St James Westminster, Hampstead, St Luke, Wandsworth, and Plumstead, and the highest rates in Hammersmith St George-in the-East, Limehouse, St George Southwark, Newington, and Lee The 159 fatal cases of measles were less than half the corrected average number in the corresponding periods of the 10 preceding years, this disease showed the highest proportional fatality in St George Hanover square, Hackney, St George-in the-East, Limehouse, Greenwich, and Lee sanitary areas The 27 deaths referred to scarlet fever were 36 below the corrected average number, the mortality from this disease showed no marked excess in any of the sanitary areas The 108 fatal cases of diphtheria were 34 below the corrected average number, this disease showed the highest proportional fatality in Strand, City of London, Limehouse, St. Saviour Southwark, St. George Southwark, Newington, and Lewisham sanitary areas The 212 deaths from whooping cough were 59 below the corrected average number, among the various sanitary areas this disease was proportionally most fatal in Kensington Hammersmith, Islington, St George-in the-East, Mile End Old Town, and

being thrown into streams Dr Sweeting enumerates other shortcomings, such as faulty slaughter houses, filthy cow-sheds, and absence of provision for disinfection or isolation of cases of infectious illness It is to be hoped that his report may be followed by adequate remedial action on the part of the local council concerned

REPORTS OF MEDICAL OFFICERS OF HEALTH

City of Edinburgh Sanitary District—By the usual method of estimation the population of Edinburgh amounted in 1898 to 295,628, but Sir Henry Littlejohn gives reasons for thinking that this number under estimates the actual population The birth rate for the year was 27 38, and the general death rate 19 6 per 1000 The density of the population in the several wards of the city ranged from 12 9 to 146 6 per acre, but, as Sir Henry Littlejohn points out, these relations convey to the ordinary reader a very imperfect idea of the actual conditions obtaining in each ward As regards the prevalence of diphtheria and enteric fever in the chief divisions of the city the following table is of considerable speculative interest

	Diphtheria.	Enteric fever	
New Town ..	9 5 ..	10 4 cases per 10,000 of population.	
Old Town	7 3	6 7	"
Southern District	12 0	6 1	"
Portobello ..	5 3	1 1	"

Sir Henry Littlejohn draws attention to the relative freedom of the "Old Town" as compared with the incidence upon the more modern "Southern District" The main feature of interest in 1898 was, however, an outbreak of typhus fever, and a chart is furnished in the report before us showing that this disease has to some extent manifested itself in the city since 1880 During 1898 there were 79 cases of this disease, 36 being males and 43 females, the cases occurring between the beginning of October and the end of December As regards age distribution a noticeable feature was the large number of children who were attacked At the commencement of the outbreak certain cases escaped recognition, and had this not been the case probably fewer attacks would have occurred Sir Henry Littlejohn thinks that the disease was imported into Edinburgh about the middle of August, and he is inclined to regard the holding of a wake in connexion with the body of a man who not improbably died from typhus fever as one of the means of spreading the disease During the course of the outbreak Sir Henry Littlejohn was, he states, much struck with the fact that, save at short distances, the disease evinced but little infective power One of the inspectors engaged in the removal of the cases contracted the disease, and a staff nurse, who slept near the typhus wards but had otherwise no known connexion with them, succumbed to an attack The fatality rate amounted to only 11 2 per cent

Eccles Urban District—Dr J H Crocker in dealing in his current annual report with the influence of schools in occasionally spreading infectious disease reports that owing to the occurrence of five cases of diphtheria amongst children attending the St Michael's Schools he examined the throats of all the children present in the schools on a certain date Out of 164 children thus examined no less than 145 had inflamed throats and he gives instances where children notified as suffering from diphtheria must obviously have been affected with the disease while still at school The corporation have decided that all dairy cattle purchased by them shall be tested by tuberculin Out of 27 cows tested in this way in October 1898, by the veterinary surgeon to the corporation, 12 or 44 4 per cent reacted

Chesterfield Urban District—Dr Meredith Richards reports that Chesterfield has now been created a hospital district under the Isolation Hospitals Act, 1893 The financial assistance offered by the Derbyshire County Council towards the structural expenses of hospitals erected in the county has induced the corporation to proceed under the Isolation Hospitals Act rather than under the Public Health Act It appears that the Borough Hospital Committee, in whom the duty of providing isolation accommodation is now vested, have agreed with the North Derbyshire Hospital Committee, which represents the district surrounding Chesterfield, to erect a joint hospital of 30 beds at Penmore Further steps will be taken when the county council can obtain the necessary loans As regards the endemicity of enteric fever in Chesterfield, Dr Richards observes that the experience of 1898 has confirmed his previously expressed opinion that the specific infection of polluted soil in the neighbourhood of dwellings through the agency of the execrable privy midden system is the main source of mischief The average infantile mortality for the last six years in Chesterfield has been 189 per 1000 births, and Dr Richards furnishes a table in his report comparing this rate with that during the same period for England and Wales and the surrounding towns of Nottingham, Leicester, Sheffield, and Derby Of these Leicester, with an average rate of 195, is the only one which exceeds Chesterfield Dr Richards has constructed an infantile life table for Chesterfield from the figures of the last six years, and he contrasts the results thus obtained with the table which appeared in the fifty fourth annual report of the Registrar General and which gives the infantile mortality figures for three rural counties (Herts, Wilts, and Dorset) conspicuous for their low rates and three selected towns (Preston, Leicester, and Blackburn) conspicuous for their high rates We have not space to analyse the figures, but it may be mentioned that out of a theoretical 100,000 children born in Chesterfield there would have died during the first two months of life 7840 infants, as against 7077 in the "three towns" and 4473 in the "three counties"

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 6719 births and 3616 deaths were registered during the week ending May 6th The annual rate of mortality in these towns, which had declined in the five preceding weeks from 23 1 to 17 7 per 1000, further fell last week to 16 5 In London the rate was 16 0 per 1000, while it averaged 16 9 in the 32 provincial towns The lowest rates in these towns were 9 8 in Derby, 10 6 in West Ham, 10 9 in Cardiff, and 13 1 in Blackburn, the highest rates were 19 8 in Salford, 20 3 in Manchester 20 6 in Liverpool, and 22 3 in Plymouth The 3616 deaths included 339 which were referred to the principal zymotic diseases, against 384 and 383 in the two preceding weeks, of these, 114 resulted from whooping cough, 91 from measles, 57 from diphtheria, 28 from diarrhœa, 25 from scarlet fever, 22 from "fever" (principally enteric), and two from small pox. No death from any of these diseases were recorded in Brighton or in Wolverhampton in the other towns they caused the lowest death rates in Croydon, Plymouth, Halifax, and Gateshead, and the highest rates in Bolton, Manchester, Salford, and Burnley The greatest mortality from measles occurred in Salford, Manchester, and Bolton, and from whooping cough in Cardiff, Birkenhead, Burnley, Preston, Salford, Oldham, Bradford, and Hull The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns The 57 deaths from diphtheria included 21 in London, six in Leicester, five in Leeds, five in Sheffield, four in Birmingham, and three in West Ham. Two fatal cases of small pox were registered in Hull, but not one in London or in any other of the 33 large towns, and no small pox patients were under treatment in any of the Metropolitan Asylums Hospitals on Saturday last, May 6th The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2139, against 2144 and 2131 on the two preceding Saturdays, 219 new cases were admitted during the week, against 163, 189 and 226 in the three preceding weeks The deaths referred to diseases of the respiratory organs in London, which had been 277 and 294 in the two preceding weeks, declined again last week to 249, and were 74 below the average The causes of 38, or 1 1 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in Birmingham, Nottingham, Bradford, Leeds, and in 15 other smaller towns; the largest proportions of uncertified deaths were recorded in Cardiff, Liverpool, Sheffield, and Gateshead

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns, which had been 18 1 and 21 1 per 1000 in the two preceding weeks, declined again to 18 5 during the week ending May 6th, but was 2 0 per 1000 above the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 12 8 in Leith and 14 9 in Aberdeen to 18 3 in Edinburgh and in Paisley and 20 1 in Glasgow The 564 deaths in these towns included

Newington The 27 deaths referred to enteric fever were within three of the corrected average number, this disease showed the highest proportional fatality in Marylebone and St George-in the East sanitary areas The 32 fatal cases of diarrhœa were 20 below the corrected average number In conclusion, it may be stated that the aggregate mortality in London during April from these principal zymotic diseases was nearly 36 per cent below the average

Infant mortality in London during April, measured by the proportion of deaths of children under one year of age to registered births, was equal to 119 per 1000 Among the various sanitary areas the lowest rates of infant mortality were recorded in Marylebone, Stoke Newington, St Giles, St. Luke, St Olave Southwark, and Lewisham, and the highest rates in Kensington St Martin in the-Fields, Holborn, Shoreditch, Limehouse, and St George Southwark

THE SERVICES

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonel Richard D Bennett retires on retired pay, Captain Richard E Kelly is promoted to the rank of Major Lieutenant-Colonel H C Kirkpatrick has arrived from Aden on privilege leave Major J G Black is posted to the station hospital, Belfast Major McCreery embarks for service in the Mauritius Captain J F M Kelly joins at Dublin for duty

ARMY MEDICAL RESERVE OF OFFICERS

Surgeon Lieutenant-Colonel Thomas Cayzer resigns his commission Surgeon Captain D L Anderson to be Surgeon Major

VOLUNTEER CORPS.

Artillery 1st Hampshire (Southern Division, Royal Artillery) Edmund Napier Close to be Surgeon Lieutenant *Royal Engineers* (Volunteers) 1st Hampshire Surgeon Lieutenant Henry Fulton resigns his commission, and is appointed Second Lieutenant (Supernumerary) *Rifle* 2nd Volunteer Battalion the Cameronians (Scottish Rifles) Surgeon Lieutenant J L Loudon to be Surgeon Captain 1st Cadet Battalion, the Manchester Regiment Israel James Edward Renshaw to be Acting Surgeon

VOLUNTEER OFFICERS' DECORATION

The Volunteer Officers' Decoration has been conferred upon Surgeon Lieutenant-Colonel Henry Colgate of the 2nd Sussex Volunteer Artillery

THE PHILIPPINES

There does not seem to be much doubt now that the end of the insurrection in the Philippines is near at hand The insurgents have been badly beaten in every engagement with the American troops and have practically already surrendered therefore President M'Kinley's belief that peace will soon be arranged appears to be well founded. The next question which will engage the attention of the United States Government will be the arrangements for safeguarding the health of the American army of occupation until matters have become settled and the new form of government has been securely established Admiral Dewey is shortly to return to America and to be succeeded in his command of the naval squadron by Admiral Watson The attention of the American nation will soon be occupied with questions of climatology, hygiene, and public health measures in respect of their new possessions

DEATHS IN THE SERVICES.

Surgeon General Robert Cockburn, late Bengal Medical Service, on April 30th, in his seventy fifth year

MEDICAL SERVICE IN THE SOUDAN

A despatch with its enclosure, from Major-General Lord Kitchener of Khartoum, G C B, K C M G, Sirdar of the Egyptian Army, dated Omdurman, Feb 8th, 1899, to Lord Cromer, contains the following passage "Captain Jennings, R A.M C, S M O, showed great gallantry and devotion, dressing the wounded as they fell under fire, the quality of which is vouched for by the casualty return He was admirably seconded by Mulazin Awal Abdel Latif Effendi Ahmed This officer has already done very valuable service at Karkoj when the whole of the Cavalry and Camel Corps were down with malarial fever, from which he also was suffering, since the action Captain Jennings and his staff have been unceasingly at work"

SIR HENRY NORBURY, K C B

Sir Henry Frederick Norbury, M D, K C.B, Inspector-General of Hospitals and Fleets, and Director General of the Medical Department of the Royal Navy, has been placed on the retired list from May 7th Sir Henry Norbury was born in 1839 and entered the Royal Navy as surgeon in 1860 During the Zulu war of 1879 he was principal medical officer of General Sir C Pearson's column and was afterwards principal medical officer of the Naval Brigade with General Crealock's column and was several times mentioned in despatches Sir Henry Norbury will still continue to hold the appointment of Director General

THE ROYAL MILITARY TOURNAMENT

The annual display at the Royal Agricultural Hall, Islington, promises to be, as indeed of late years it always has been, a most attractive one The pageant "Warriors of Britain" has been arranged to show the evolution of the British soldier during the past three and a half centuries and the typical periods which have been chosen are—"The Wars of the Roses," "Newbury," "Lucknow," and "Khartoum" (Omdurman) The combined display—the always popular *finale*—will represent the Storming of Passer Sala, 1875 The tournament will open on Thursday, May 25th, and close on June 8th

SEASIDE SANATORIA FOR SOLDIERS

The result of the experiment in providing accommodation during the coming summer at seaside garrisons, to which we have already called attention, will be awaited with interest If the invalids and convalescents be judiciously selected and the system properly worked it may be confidently expected that the experiment will be attended with excellent results and be a real boon to our sick and convalescing soldiers The local arrangements will, of course, be left largely in the hands of the general commanding and the principal medical officer of the respective districts

THE MEDICAL PROFESSION AND THE PUBLIC SERVICES

What with the fighting in Samoa and that in Uganda, the unsettled state of affairs in regard to the Transvaal, the China convention question, and the settlement of the Soudan, the Government of this country must have abundance of occupation for, and be largely in need of, the services of members of the medical profession at the present time and in the near future The augmentation of the Navy will also call for a corresponding increase in the naval medical service

Correspondence.

"Audi alteram partem."

"A CRITICISM OF THE MORE COMMONLY EMPLOYED TESTS FOR ALBUMIN IN URINE"

To the Editors of THE LANCET

SIRS,—I have to apologise to Mr Cammidge that by mischance I did not observe the statement in his article that he had employed quantitative methods in his investigations In his courteous reply he is quite right in assuming that had I observed the sentence referred to I would not have written as I did

With regard to our disagreements I regret that Mr Cammidge did not add to the value of his work by publishing the details of processes, precautions, and weighings which chemists expect in such a case My simple experiments have the advantage that they avoid sources of fallacy and can easily be verified or refuted by any gentleman interested in the matter So far as my knowledge goes egg albumen, except with regard to ether and coagulating temperature, reacts the same to tests as the albumins to be tested in urine If I pursue the investigations I will certainly follow the synthetic plan That is to say I will examine the delicacy of the tests when applied to solutions of albumin in water at first, I will then make, say, a 2 per cent solution of urea in water and use that solution to dilute a solution of albumin of known strength, examining the action of the tests for albumin at each dilution Similarly the action of the tests in

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING APRIL, 1899

(Specially compiled for THE LANCET.)

Sanitary Areas.	Estimated population in the middle of 1899	Notified Cases of Infectious Disease.										Deaths from Principal Infectious Diseases												
		Small pox.	Scarlet fever	Diphtheria.*	Typhus fever	Enteric fever	Other continued fevers.	Puerperal fever	Erysipelas	Cholera.	Total	Annual rate per 1000 persons living	Small pox.	Measles	Scarlet fever	Diphtheria.†	Whooping cough.	Typhus fever	Enteric fever	Other continued fevers.	Diarrhœa.	Total	Annual rate per 1000 persons living	Deaths from all causes	Death rate per 1000 living	Deaths of infants under one year to 1000 births.
LONDON	4,546,752	6	978	665	—	141	1	23	338	—	2152	6·2	—	159	27	108	212	—	27	—	32	565	1·6	6279	18·0	119
West Districts.																										
Paddington	128,794	—	15	9	—	4	—	—	5	—	33	3·3	—	1	—	2	3	—	—	—	1	7	0·7	160	16·2	95
Kensington	172,899	—	34	13	—	1	—	2	13	—	63	4·8	—	—	1	1	17	—	—	—	—	19	1·4	243	18·3	160
Hammersmith	108,785	—	20	20	—	1	—	2	5	—	48	5·8	—	5	2	4	11	—	1	—	1	24	2·9	164	19·7	141
Fulham	130 720	—	39	28	—	1	—	1	7	—	74	7·4	—	—	1	2	9	—	2	—	—	15	1·5	168	16·8	118
Chelsea	96,721	—	14	14	—	4	—	2	4	—	38	5·1	—	1	1	2	5	—	1	—	—	10	1·3	132	17·8	108
St. George Hanover-square	80,876	—	9	7	—	5	—	—	5	—	26	4·2	—	6	—	2	1	—	—	—	—	9	1·5	83	15·3	111
Westminster	62,117	—	22	5	—	1	1	—	6	—	35	8·8	—	1	2	1	1	—	—	—	—	5	1·3	67	16·8	106
St. James Westminster	21,827	—	5	—	—	2	—	—	1	—	8	4·8	—	—	—	—	1	—	—	—	—	1	0·6	29	17·3	143
North Districts.																										
Marylebone	140 139	1	21	7	—	3	—	1	12	—	45	4·2	—	1	—	—	5	—	3	—	1	10	0·9	165	17·2	89
Hampstead	80 252	—	8	3	—	—	—	—	2	—	13	2·1	—	2	—	1	—	—	—	—	—	3	0·5	81	13·2	129
St. Pancras	244 548	—	58	34	—	12	—	2	21	—	127	6·8	—	15	2	8	11	—	3	—	2	41	2·2	366	19·5	123
Islington	348,035	2	70	16	—	12	—	—	20	—	120	4·5	—	15	—	1	29	—	—	—	2	47	1·8	454	17·0	112
Stoke Newington	35,187	—	9	—	—	2	—	—	1	—	12	4·4	—	—	—	—	—	—	—	—	—	—	—	36	13·3	86
Hackney	222 571	—	57	25	—	11	—	3	23	—	119	7·0	—	18	2	4	4	—	2	—	1	31	1·8	324	19·0	119
Central Districts.																										
St. Giles	37 196	—	5	2	—	1	—	—	5	—	13	4·6	—	1	—	—	—	—	—	—	2	3	1·1	59	20·7	76
St. Martin in the-Fields	12,142	—	—	1	—	—	—	—	—	—	1	1·1	—	1	—	—	—	—	—	—	—	1	1·1	11	11·8	667
Strand	23 016	—	1	3	—	1	—	—	3	—	5	2·8	—	—	—	2	—	—	—	—	—	2	1·1	35	19·8	105
Holborn	29 621	—	5	3	—	4	—	—	4	—	16	6·6	—	2	—	—	2	—	1	—	—	5	2·2	58	25·5	175
Clerkenwell	66 068	—	16	16	—	4	—	—	3	—	40	7·9	—	3	1	1	3	—	1	—	—	9	1·8	90	17·8	126
St. Luke	40,868	—	4	2	—	2	—	—	4	—	11	3·5	—	—	—	—	1	—	1	—	1	2	0·6	64	20·4	63
City of London	27 986	—	3	3	—	1	—	—	3	—	8	3·7	—	—	—	2	—	—	—	—	—	2	0·9	32	14·9	118
East Districts.																										
Shoreditch	121,071	—	14	15	—	4	—	—	12	—	45	4·8	—	2	—	2	3	—	—	—	3	10	1·1	178	19·2	155
Bethnal Green	128 938	—	24	23	—	6	—	1	21	—	75	7·6	—	7	—	5	4	—	—	—	5	21	2·1	200	20·2	112
Whitechapel	81 391	1	9	5	—	1	—	—	7	—	23	3·7	—	2	—	1	2	—	1	—	—	6	1·0	123	19·7	115
St. George-in the-East	48,560	—	6	10	—	4	—	—	4	—	24	6·4	—	7	1	1	4	—	2	—	—	15	4·0	91	24·4	151
Limehouse	58,807	—	10	5	—	4	—	—	5	—	24	5·3	—	5	1	3	4	—	—	—	1	14	3·1	119	26·4	153
Mile End Old Town	113 161	—	16	17	—	1	—	1	16	—	51	5·9	—	4	—	1	9	—	2	—	2	16	1·8	184	21·2	93
Poplar	170 606	1	27	21	—	12	—	—	13	—	74	5·7	—	4	2	1	6	—	1	—	2	16	1·2	249	19·0	107
South Districts.																										
St. Saviour Southwark	24 207	—	7	6	—	3	—	—	2	—	18	9·7	—	—	—	2	2	—	—	—	—	4	2·2	48	25·8	113
St. George Southwark	60,536	—	14	28	—	3	—	1	5	—	51	11·0	—	5	2	7	5	—	1	—	1	14	3·0	116	25·0	216
Newington	124 166	—	18	44	—	7	—	—	10	—	79	8·3	—	—	—	11	13	—	1	—	2	34	3·6	211	22·2	118
St. Olave Southwark	11 098	—	2	—	—	—	—	—	1	—	3	3·5	—	1	1	2	3	—	—	—	1	1	1·2	8	9·4	38
Bermondsey	85,835	—	15	19	—	2	—	1	5	—	42	6·4	—	8	1	1	1	—	1	—	—	8	1·2	153	23·2	125
Rotherhithe	41 050	—	17	2	—	—	—	—	3	—	22	7·0	—	1	1	12	18	—	1	—	—	3	1·0	68	21·0	149
Lambeth	308 108	—	48	66	—	4	—	2	29	—	149	6·3	—	13	2	5	7	—	1	—	1	40	1·7	427	18·1	131
Battersea	174,996	—	43	24	—	2	—	1	16	—	88	6·4	—	17	2	9	6	—	1	—	—	16	1·2	176	13·1	109
Wandsworth	209 655	—	60	42	—	1	—	1	12	—	116	7·2	—	6	—	3	6	—	—	—	1	13	0·8	226	14·1	111
Camberwell	264 817	1	54	47	—	4	—	1	13	—	120	5·9	—	1	—	4	1	—	1	—	1	31	1·5	325	16·0	133
Greenwich	182,513	—	94	46	—	7	—	—	16	—	162	11·6	—	1	—	1	—	—	—	—	1	30	2·1	236	16·9	105
Lewisham (excluding Penge)	91 037	—	16	15	—	3	—	—	1	—	35	5·0	—	3	—	2	2	—	—	—	1	11	1·6	95	13·6	63
Woolwich	41,542	—	6	7	—	1	—	—	1	—	15	4·7	—	1	—	1	2	—	1	—	1	3	0·9	72	22·6	113
Lee	40 219	—	3	4	—	—	—	—	1	—	8	2·6	—	1	—	—	1	—	—	—	1	9	2·9	46	14·9	100
Plumstead	64 031	—	60	10	—	—	—	1	5	—	76	1·5	—	—	—	—	—	—	—	—	—	4	0·8	74	15·1	110
Port of London	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 19 cases of membranous group.

† Including deaths from membranous group.

in gouty asthma the condition of the nasal cavities should not be ignored so in asthma with marked nasal symptoms the gouty factor ought not to be disregarded

I am, Sirs, yours faithfully,

Buxton, May 6th 1899 WM ARMSTRONG

"EXTRA-UTERINE FŒTATION"

To the Editors of THE LANCET

SIRS,—On referring to the report of my case "A Provincial Surgeon' will find that it is the five years' sterility and not the tubal pregnancy which I consider was produced by the use of means to prevent conception

I am, Sirs, yours faithfully,

Plymouth, May 2nd, 1899. Q HAMILTON WHITEFORD

"AN IMPORTANT POINT UNDER THE INFECTIOUS DISEASES (NOTIFICATION) ACT"

To the Editors of THE LANCET

SIRS,—I have only just now seen in THE LANCET of April 15th a letter signed "M B, C M" on "An Important Point under the Infectious Diseases Act" A similar point arose between me and the local sanitary authority and I referred the matter to the Local Government Board Their decision was that the authority must pay the whole amount claimed, though a considerable portion of the claim was for certificates rendered some year or more previously I based my claim on the ground that each certificate was in itself a claim for payment and was in effect due at once and that no further account was necessary The sanitary authority accordingly paid the whole account and directed their inspector in future to pay the fee of 2*s* 6*d* for each certificate returned by me to him

I am, Sirs, yours faithfully

H G ARMSTRONG

Wellington College Berks, May 8th, 1899.

THE DISTRIBUTION OF SERUMS

To the Editors of THE LANCET

SIRS,—Can you inform me under what conditions local sanitary authorities are allowed to distribute to medical practitioners the anti diphtheritic serum? Is there any limit as regards the position of the patient?

I am, Sirs, yours truly,

April 30th, 1899 DISTRICT COUNCILLOR

*** No sanitary authority has any power to distribute to medical practitioners any drugs or remedial measures except under one or other of the two following conditions first, when the Local Government Board have issued an order to this effect under the Public Health Act, 1875 on the ground that England is threatened with some formidable epidemic, endemic or infectious disease This power has hitherto been limited to outbreaks of cholera which have invaded England Secondly, in connexion with the treatment of persons removed to hospitals for infectious diseases provided by sanitary authorities But if a medical officer of health is of opinion that the use of anti-diphtheritic serum amongst persons who have been, or are likely to be, exposed to the infection of that disease would tend to prevent its further spread the sanitary authority have full power to supply the serum to him for use under his supervision as a means of prevention The real distinction is between the prevention of infection and the treatment of an already existing case of disease —ED L

TELEGRAMS AND THEIR ANSWERS

To the Editors of THE LANCET

SIRS —I have been corresponding with the Post Office authorities for some months endeavouring to get them to allow me and my neighbours to hand stamped telegrams to the messenger boys who constantly pass our door on the way to the district office This the late and the present secretaries of the General Post Office refuse to allow on many futile and absurd grounds, but they insist that every messenger delivering a telegram is *ordered* to ask if there is an answer This, as we all know, is not done, but I wish through your columns to inform my brethren of the rule and to ask them to instruct their servants to detain all messengers delivering telegrams until they ascertain whether an answer is required —I am, Sirs, yours faithfully,

May 8th 1899. F R C S

MEDICAL AID INSTITUTIONS AND CLUB PRACTICE

To the Editors of THE LANCET

SIRS,—It seems to me that the profession is now ripe for reform in reference to both of the above The General Medical Council has done good work in doing away with the unqualified assistant and now his day is over we have a chance of asserting ourselves But we cannot do this unless we have union and stress put upon those who will not unite Individually we can do nothing but fight a losing game I had one club of men only which wished me to take the lads so as to form a juvenile club I mentioned the terms on which I should take them and shortly after got notice of the parent club leaving me as another medical man was taking their lads at less I hold another where precisely the same thing happened and the same medical man stepped in, with the exception that the parent club remained with me and the lads were taken by him at less again Another club, also of men only, wanted me to take females I declined absolutely and got notice with the intimation that Dr So and So would take them This medical man lived four miles away and set up a branch practice here in charge of an unqualified assistant on the strength of this appointment Medical aid institutions rob us of many fees and take away many of our patients who are perfectly satisfied with our charges till some neighbour who is perhaps better off than themselves or some agent tempts them by the offer of medical attendance at less pence than they were paying (and able to pay) shillings, and in some cases pounds before

You, Sirs, know all this, you have advocated our cause too long and entered into the subject too minutely not to know that want of combination allows medical men to do work which, I believe, three-fourths of them are sick of Further, to a conscientious medical man there is no profit in it The advance in our medical and surgical knowledge demands increased expenditure The Compensation Act demands that we should scrutinise our cases more closely than ever lest the law requires our aid, besides, it causes more work as more trivial injuries come under observation than formerly The Notification Act does the same lest we are caught napping over some infectious case which we have not notified and the people themselves are better able to pay The Medical Defence Union and other unions have been successes and I am glad to say I have long been a member of the former though I have not required its help I think so highly of their work that the words, in my opinion "member of Medical Defence Union or member of such and such a union" should have a place after such member's name in the Medical Directory to let each man know where he would be almost sure to find support in the cause I am writing about Could not a similar union be formed with local branches to stir up our erring ones, to band us together and to hold meetings on the subject, where the arrangements which have already been adopted with success could be put before general practitioners, and to formulate such plans as would by union increase our remuneration from the clubs and help largely to do away with medical aid companies? I am aware that such a union would require money, but I think that many practitioners would gladly subscribe to get rid of the octopus which holds so many in its grasp The Medical Defence Union or the other unions have done good work for the modest subscription required fom their members Is it possible that these unions, or one of them, could—the subscription being increased by consent—do this further work? It seems to me that the organisations already formed would be better able to meet the difficulties than a new one They have a large membership and though perhaps not all of those enrolled are interested personally in the matter still a very large number must be, and the stronger should help the weaker Such a combination would need much strength of membership and funds to carry on,

presence of common salt, phosphates, uric acid, &c, when present alone in aqueous solution containing albumin should be noted After an investigation of the effect of such single additions on the delicacy and working of the tests the next step would be to go on to mixtures, and the final results would be obtained by diluting albumin solution by urines of various specific gravities I believe that in such a way only could reliable and comparable results be obtained Anyone who has had experience of the great care and prolonged washing necessary to obtain decimal places in the percentage results of a simple inorganic analysis can hardly refrain from scepticism regarding many of the results obtained from a complex fluid of varying composition such as urine I am, Sirs, yours faithfully,

Glasgow, May 6th, 1899. WALTER COLQUHOUN

THE APPLICATION OF THE OPEN-AIR SYSTEM OF TREATMENT TO THE INSANE

To the Editors of THE LANCET

SIRS,—During the past year or two I have seen some apparently very good results in ordinary forms of insanity from open air treatment conducted somewhat on the Nordrach system, but of course modified to suit individual cases according to their mental condition For the information of those who are not conversant with the Nordrach system and for the guidance of those who may wish to adopt the system, in whole or in part, in this country, I subjoin the following few remarks concerning it

The life at Nordrach may be said to be a natural life carried out under unnatural conditions It is natural inasmuch as it is the life which primitive man would lead, for primitive man lived entirely in the open air and habitually, no doubt, over ate himself, whereby it is supposed that he lived to a fabulous age in perfect health It is unnatural inasmuch as it is entirely foreign to our modern ideas of living, for when it rains we like to keep dry, and when there is wind we like to keep out of it, and we like to eat enough, but we do not like habitually to eat to excess At Nordrach the patient under treatment rises about 8 A M and receives a cold douche at a pressure of about three atmospheres, followed by hard friction Each room at Nordrach is fitted with its own douche and differs in this way from other German and from Swiss sanatoria where there is generally a special douche room After a substantial breakfast the patient goes for a specially prescribed walk at a specially prescribed pace and walks till one hour before lunch and during that one hour he must rest quietly on the couch or bed in his room The windows are conspicuous by their absence, only the open spaces remain Thus complete rest and fresh air are assured at the same time Lunch, or rather dinner, is a most formidable meal The medical officer sits at the middle of the table He carves for each patient and there the patient sits until he has eaten everything—and hard work the patient finds it is to do so After this he will rest a short time, for he hardly feels capable of walking Then follows another prescribed walk at a snail's pace and another hour's rest in the bedroom before supper at 7 P M, which is nearly as substantial as dinner There is more walking after supper and the patient is in bed by 10 P M Nothing of any kind is allowed between meals and nothing is wanted Patients put on weight at a most surprising rate and completely alter their appearance, they soon look the healthiest of the healthy The sanatorium itself consists of two or three small houses in which nearly all the rooms are bedrooms Sitting rooms are not required The dining room is in an entirely separate building, the windows of which are never closed except in the worst of weather Milk or beer is drunk at meals, but milk is hardly necessary as so much weight can be put on without it and it is often better to keep milk in reserve in case of a relapse when it is most valuable

I am induced, but with much diffidence, to suggest a more extended use of the open air system than has hitherto been the custom in the treatment of the insane, for it is generally admitted that the insanities as met with at the present day are usually associated with debility, malnutrition, lowered vitality, nervous degeneration, exhaustion, and kindred bodily conditions The open air system, where it is possible to employ it, seems to me for these reasons alone to be clearly indicated But there are more cogent reasons than any of those already given for the fullest employment possible of the open air system It is a well known fact that a very close and intimate connexion exists between tuberculosis and insanity The curious in such matters will find this subject exhaustively discussed by Dr Clouston of the Royal Edinburgh Asylum in a paper read by him so far back as the beginning of the year 1863 and published in the *Journal of Mental Science* for April of that year, and the subject of phthisical insanity is fully dealt with recently in Tuke's Dictionary of Psychological Medicine Some of the statistics given by Dr Clouston to prove the very important part which tubercle plays in the insanities are startling and I take the liberty of quoting them Post-mortem examination revealed the fact that out of a total of 463 deaths in one asylum tuberculous deposit was found in the bodies of 232 patients, the percentage being 51 7 in males and 73 in females Thus it is seen that the proportion of persons dying in asylums with tuberculous deposit in various organs of the body very much exceeds the proportion found similarly affected in the general population The tuberculous condition in the insane cannot always be ascertained during the lifetime of the patient, it often seems to remain latent or to run its course without giving active external evidence of its presence A final sudden breakdown in pulmonary phthisis is not uncommon and it is perhaps still more common to ascertain the existence of tubercle in various organs for the first time in the post mortem room

I am, Sirs, yours faithfully,

West Malling Kent, May 10th, 1899. JAMES ADAM

NASAL TREATMENT IN ASTHMA

To the Editors of THE LANCET

SIRS,—I was somewhat surprised during the very interesting debate on "Asthma in Relation to Disease of the Upper Air passages" at the Laryngological Society on Friday last to find that no speaker, with the exception of Dr Dundas Grant, laid any great stress on the very frequent presence of the gouty diathesis in the asthmatic I venture to suggest that it is not impossible that some of the failures related may be due to neglect of that factor

Somewhat of a sceptic as regards the value of nasal treatment in asthma my conversion was brought about by means of what appeared to be a typical case of gouty asthma, most severe attacks frequently alternating either with eczema or articular gout Persistent gout treatment under the guidance of several eminent physicians and at various spas had failed to give more than temporary relief, but since the fortunate discovery and thorough removal of several nasal polypi four years ago there has been no real attack of asthma In a letter received last week the patient says "Although wonderfully well I find that if I neglect my precautions regarding dietary there is at once a tendency to irritation in the nose and to slight difficulty of breathing" This case, in addition to a number of others working out on similar lines, makes me think that there is frequently a double source of irritation present.

Another circumstance which has arisen in five cases has impressed me a great deal All were treated by skilled operators In three cases polypi were removed, in two there was radical treatment of hyperæsthetic patches on the nasal mucous membrane, but in all recurrence of asthma took place after a very little time. All came under bath treatment for gout, which was followed by the use of a carefully planned dietary devised with a view to aiding uric acid elimination There was in each case more or less improvement in the asthma but there was much left to be desired I referred them to rhinologists and in every case the nasal lesions were found to have recurred Removal of these was followed by relief so extraordinary as to amount to a practical cure and although from one to three years have elapsed all these patients have remained well except one who from time to time takes fits of dietetic unrighteousness. It suggests itself as a possible explanation that as in almost all cases of this type there is marked failure to excrete the normal amount of uric acid by the kidneys (examination of the 24 hours urine by the Gowland Hopkins process always showing a decrease of from 10 to 30 per cent) there may be an attempt at vicarious elimination by the nasal mucous membrane or at any rate a deposit in a part the vulnerability of which has become increased A certain amount of irritation may be thus set up, leading to the renewed growth of polypi, &c Careful observation has convinced me that as

from jigger (c) Medical examination on board ship of passengers for India eight days after leaving an African port and afterwards at intervals of three days with the object of detecting cases which were infected shortly before embarkation and which may have developed on the voyage (d) Careful medical inspection at the port of disembarkation in India of arrivals from Africa and detention for treatment of all cases of jigger in which the parasite has not already been extracted or destroyed"

April 12th.

THE TENTH INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY

(FROM OUR SPECIAL COMMISSIONER.)

The Medical and Sanitary Congresses of 1900 and the Paris Universal Exhibition

THE International Congresses which are of the greatest interest to the medical profession will be held in rapid succession, indeed, some of them actually clash The most important, however, are kept well apart but close to each other The first, already fully described, is the International Congress on Medical Ethics, and it will sit from July 23rd to the 28th. This is followed immediately by the International Medical Congress which meets from August 2nd to the 9th, and then will come the International Congress of Hygiene from August 10th to the 17th. Thus a visit to Paris extending over three and a half weeks will suffice for those who desire to attend all three congresses, but as a few days should be devoted to the Universal Exhibition it would be well to allow four weeks for the purpose These three congresses also clash with some other congresses Thus the International Congress on Hypnotism will be held from August 12th to 15th and the International Congress on Poor Relief State and Private Charities will meet from July 30th to August 5th. Then there will be an International Congress to Ameliorate the Condition of the Blind, from August 5th to 8th, and the International Dental Congress will take place from August 8th to 14th. Preceding the congresses just mentioned from June 18th to 21st there will be an International Congress on the Housing of the Poor This latter congress will be of interest to sanitary reformers and medical officers of health An International Congress of the Medical Press will also be held on July 27th 28th and 29th and there is to be an International Congress on Secondary or Superior Education which has for its President Dr Brouardel, dean of the Paris Faculty of Medicine These are all so to speak, official congresses, recognised by the Government, organised in connexion with the Universal Exhibition, meeting rent free either at the Palace of Congresses now in course of construction on the exhibition grounds or in such public buildings as that of the Faculty of Medicine, or in the University The Government, at its own expense, will print and post a great part of the circulars of invitations, &c, issued, and will also publish the reports of the proceedings in volume form Everything will be done on a large and liberal scale Nevertheless, the Government aid does not suffice to cover all the expenses of these congresses therefore the members are generally expected to pay a fee which rarely will exceed 20 francs, or 16s and in some instances will be even less For most of the congresses the report of the proceedings will make a volume which in itself will be worth more than this sum Then the members of these congresses will be generally invited to one or two Ministerial receptions and will profit by a large reduction of the railway fares on the French lines Thus, it will be seen that the members of the congresses will be treated throughout as privileged persons and distinguished guests of the nation All public institutions which may interest them will be thrown open to their inspection, and the members of these congresses will have no reason to regret having accepted the invitation so cordially and hospitably made to all who have some knowledge of and interest in the subject matter of these various international gatherings

The Tenth International Congress of Hygiene and Demography will naturally be one of the largest most important, and most popular of these great assemblies Even at this early hour the Organising Committee have come to the conclusion that the Palace of Congresses will be too small to hold the members and delegates from the 18 to 25 nationalities which are likely to be represented. The central hall of this Palace will seat 800 or at most 1000 persons As there are so many other attractions and congresses during the same year it is not thought that the members of the Congress of Hygiene will be as numerous as at the last gatherings held at Madrid, Budapest, and London, but nevertheless their number will certainly exceed a thousand It has therefore been decided to hold the opening ceremony at the Grand Amphitheatre of the New Sorbonne. This is a most happy choice, for not only does this magnificent hall contain no less than 3000 stalls, but it is one of the most scientifically and perfectly ventilated buildings in the world Indeed, no better object-lesson could be given to the members of the Congress than the ventilation and warming of this noble structure The sectional meetings of the Congress will take place in the different smaller amphitheatres and class rooms of the Faculty of Medicine According to the preliminary programme, now in course of preparation but not yet printed, there will be one section of demography and seven of hygiene In each section reports will be presented and are destined to form the basis of the discussions The reporters have been appointed for nearly all the subjects selected. Formerly eminent authorities were selected from different nationalities to draw up such reports, but, in practice, this did not work satisfactorily The reporters in foreign countries were often late in sending in their manuscripts and not being in touch with the other organisers or reporters did not fully understand what was expected from them On this occasion it has been decided to confide the work exclusively to Frenchmen who are on the spot, but these reporters are to communicate with foreign authorities on the subjects selected and to include the opinions of these correspondents in their reports On some previous occasions this method of procedure has been proved to give good results

The First Section will be devoted to Bacteriology Its president is Dr Laveran and its secretary is Dr Netter The committee and reporters comprise such well known bacteriologists as the Dr Chantemesse, Dr Metchnikoff, Dr Miquel, Dr Nocard, Dr Roux, Dr Thoinot, and others The first question to be treated in this section is of the greatest practical importance, though its solution is a matter of considerable difficulty This question is imposed on the Congress as a legacy from the last Congress held at Madrid. It consists in the establishment of a unity of measurement for serums The second question is the prophylaxis and preventive treatment of diphtheria, the reporter being Dr Roux of the Pasteur Institute. The third question is the cause and prevention of the toxic poisoning due to decomposed flesh or preserved meat, and the reporters are Dr Armand Gautier and Dr Vaillard The fourth question is that of pathogenic microbes in the soil and in water (cholera, typhoid fever, and other maladies), the reporters are Dr Thoinot and Dr Vaillard The fifth question will be the action of water and vegetables in the etiology of intestinal disorders.

The Second Section is devoted to Food supply This is the section for chemists and veterinary surgeons Dr Chauveau is the president and M Bordas is the secretary The first question has not been sufficiently discussed and studied in England It relates to the utensils—saucepans, tins, pots and pans, bottles, &c —employed in the cooking and preservation of food, beer, wines &c, of what materials should these utensils be made and what substances should be forbidden by the law, M Riche is the reporter The second question deals with the value of alimentary substances to which some preserving agent has been added. The reporters are M Ch Girard and M Bordas The third question is the unification of the methods of analysis of water and air, reporter M Albert Levy The fourth question deals with alimentary preserves, the methods to be employed so as to avoid accidents and the unification of international control, M Ogier is the reporter The fifth question is concerned with the conditions necessary so as to bring about a general and identical method of meat inspection in public and private slaughter houses, and in all places of retail distribution, M. Barrier is the reporter

The Third Section is on Sanitary Architecture and Engineering M Bechmann, chief sanitary engineer of the city of Paris is president and M Launay is the secretary M Emile Trélat, the distinguished architect and a leading European authority on ventilation, is, with many other well known sanitary reformers, a member of the committee of this

but I think that many more would join, as the subject of my letter is always before most middle and working class practitioners, and their number must be great, while the business proper of the unions does not so immediately and so frequently touch every practitioner, not that I wish to underrate their valuable work in any way I have already spoken to the great good they have done But if they could not take up this additional work—and I hope they could—could another union not be formed to do so? I believe I have seen that the council of the Medical Defence Union will have a motion brought before it to accept no more members who further the work of medical aid institutions Could not the medical societies throughout the land aid the movement by a similar resolution? By so doing they would help to elevate the dignity, the prestige, and the status of a profession so very many members of which have bartered away its liberties, its advantages, and its high tone for a mess of pottage I have written a very long letter and must apologise for taking up so much space, but I should like to see something come of it, and perhaps, though my suggestions might not be adopted, they might lead to other and more practicable ones, if so I should be better pleased

I am, Sirs, yours faithfully,

May 6th 1899. GENERAL PRACTITIONER

MR T W RUSSELL, M P, AND THE VACCINATION ACT, 1898

To the Editors of THE LANCET

SIRS,—In your report of the recent dinner of the Sanitary Institute Mr T W Russell, Parliamentary Secretary of the Local Government Board, is stated to have said that the Vaccination Act of last session had "to a large extent abolished stational vaccination" and that "compulsion and all its effects were abolished" What does Mr Russell mean? The Act has abolished stational vaccination not "to a large extent" merely but completely The Local Government Board have refused to allow the vaccination stations to be maintained even in a locality so exceptionally situated as Liverpool is Nobody should know better than Mr Russell that compulsion is not abolished A parent may, if he likes, obtain exemption from vaccination on terms, the terms being a payment of a variable amount and attendance at a police-court If he does not like to obtain exemption on these terms he will be compelled to have his child vaccinated or to pay a single penalty In either case there is compulsion from which escape may be purchased by a money payment, as was the case before the Vaccination Act was passed The only difference is that now the terms of exemption are somewhat easier At recent petty sessions at Midhurst three defendants were fined respectively 10*s*, £1, and £1 10*s* for not having their children vaccinated What is this but compulsion? It is strange that the Parliamentary Secretary of the Local Government Board should be apparently ignorant of these facts —I am, Sirs, yours faithfully,

May 8th, 1899 A CONSTANT READER

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

The Pasteur Institute Committee —Progress of the Plague — The Importation of Jigger

AN occasional spasm of energy is displayed by the promoters of the Pasteur Institute for India The central committee have at last ventured to pass a resolution asking the Government for an annual grant equal to the average cost during the last three years of sending soldiers bitten by rabid animals to Paris At the same time the central committee decided to inform the Home Department that if this grant were given the central committee would establish an antirabic institute if the Government would allow the services of one of their officers to take charge thereof All these conditional offers and acceptances between outside bodies and the Government drag on indefinitely and the fulfilment of this scheme is almost as far off as ever Why does not the Government itself take the matter in hand and establish a Pasteur department of the medical service? They could easily pick out a promising, young, and well qualified officer and send him to Paris for instruction The third resolution passed by the central committee was to invite the Secretaries in the Home and Military Department to become members of the committees This is probably not of much value, but these little courtesies seem to be necessary in India. I am glad to hear, however, that Colonel Fenn, surgeon to the Viceroy, has joined the central committee as more energy and new blood are wanted for his movement

I am able to record a considerable improvement in the course of the plague There is a continued and marked decline in Bombay, where recently from 1000 to 1500 deaths have been occurring regularly every week There is a general improvement elsewhere in the Bombay Presidency with the exception of Karachi, where the outbreak still remains severe and does not give any indications of immediate abatement In the Jullunder district of the Punjab a few cases have occurred, but the outbreak is not serious The most curious example of the incidence of plague is in Calcutta If there is any place which might be expected to suffer severely it is Calcutta and yet all last year only 200 deaths were recorded and the outbreak this spring still keeps within very moderate dimensions There are signs now that it is even abating and at no time have there been reported as many deaths for a whole week as Bombay has suffered in one day No satisfactory explanation has been given The rat population does not seem nearly so numerous as in Bombay and elsewhere, but the type of the disease besides does not appear to be nearly so virulent. Whether the frequency of malaria has anything to do with it is not proven The theory is very fascinating because there is evidence to show that the toxin of plague is inimical to malarial developments Plague, however, has developed to a sufficient degree during this second outbreak to suggest that if the antagonism does exist the more virulent and fatal disease of plague overcomes in time and by degrees the apparently protecting influence of malaria The conditions of the basements of the majority of the dwellings seem to offer unfavourable harbours for a large rat population and it is therefore possible that the slow development and slow spread, as well as lessened virulence of the outbreak, may be associated with the absence of that extreme intensity which characterises the disease in the rat In the district of Bengal also the plague does not seem to make much headway A few places still continue to record cases but there is no serious outburst In Nagpur city the improvement previously recorded continues and in Poona the expected development seems to hang fire The cases are still numerous in the Kolar gold fields and labour troubles are much complained of

At the instance of the Government of India new and stringent regulations regarding the inspection and disinfection of native passengers and crews leaving Calcutta are likely to be issued almost immediately by the Government of Bengal, which will bring the rules of the port more directly into line with the requirements of the Venice Convention and under these regulations the clothing and bedding of all deck passengers and native crews will have to be disinfected on shore within the limits of the port before embarkation on outgoing ships and steamers It is proposed to have three or four disinfecting stations all within the limits of the port

Fresh evidence of the value of inoculation is furnished by the results obtained at Broach At the same time, as the people who were chiefly inoculated were Parsees and not a proportionate representation of the whole population, too much reliance cannot be placed on the published figures Better evidence is furnished by the tailors of Broach who were living in a camp outside the town and here it seems very clear that those who were inoculated came off much better than those who refused to go through the operation Amongst the 90 inoculated not a single case occurred while there were ten cases and six deaths among those who remained uninoculated (135)

With regard to the importation of "jigger" a resolution has been issued by the Bombay Government concerning measures to be taken to prevent the importation into India from British East Africa of the disease called by that name. The Surgeon General has recommended the following "(*a*) Periodical inspection and careful treatment of all Indian coolies employed by Government in British East Africa or in other parts of the continent having direct communication with Indian ports Special attention to be paid to time expired men for a month before their return to India. (*b*) Medical inspection of all persons leaving East African ports for India and prohibition of embarkation for India of those found on medical inspection to be suffering

f gastric ulcer, cholelithiasis, and uncontrollable vomiting here was a possibility that relief might be obtained by urgical means Operations were performed six times for astric hæmorrhage Of the 77 patients eight died, being a ortality of 10 per cent. Previously to 1895 the mortality as 22 per cent., but since that year it had been 2 3 per cent he causes of this great improvement were that the patients ere operated on at an earlier stage than formerly and that etter methods were employed The Murphy button deserved pecial commendation The results of gastro-enterostomy ere better than those of resection of the pylorus After peration it was found that dilatation of the stomach isually disappeared somewhat quickly, that the normal notor functions were regained, that the quantity of free ydrochloric acid diminished, and that lactic acid was no onger present A pylorus-like sphincter sometimes formed it the site of the gastro-intestinal fistula —Professor EWALD Berlin) said that he was glad to see surgeons attending nedical congresses and communicating their results to the nedical branch of the profession

Diagnosis of Gastric Ulcer

Dr. SCHÜTZ (Wiesbaden) said that certain symptoms produced by some diseases of the colon, such as colitis, or even certain symptoms produced by constipation, were very similar to those of gastric ulcer The occurrence of hæmorrhage served to confirm the diagnosis of ulcer, but in the absence of hæmorrhage it was possible that the phenomena presented might be accounted for by the conditions above mentioned The pain in diseases of the colon and of the stomach was felt as a rule in the pit of the stomach Pain in the stomach might sometimes be removed by free emptying of the colon In colitis the quantity of free hydrochloric acid was diminished By attention to these points patients with doubtful symptoms might sometimes be spared the inconvenience of an unnecessary treatment for gastric ulcer

Tuberculosis of the Larynx

Dr STURMANN (Berlin) expressed the opinion that laryngeal tuberculosis was not a local disease With few exceptions it did not occur primarily and was seldom confined to the larynx Surgical treatment as recommended by the specialists was therefore contra indicated in the majority of cases, for it was likely to diffuse and aggravate the tuberculous condition Surgical treatment in this disease went no further than the relief of symptoms Hygiene and diet ought to be attended to as in pulmonary tuberculosis Rational prophylactic measures were very valuable Laryngeal tuberculosis was as a rule preceded by simple laryngitis, which must be energetically combated Plenty of nourishing food was essential and sanatogen had been found valuable for such patients Affections of the larynx ought to be treated like those of the joints by rest ice, hydropathy, or a mild antiseptic Menthol could be highly recommended for the relief of the pain Operations including cauterisation, ought to be performed only on robust persons free from lung disease —Dr SCHMIDT (Frankfort) opposed those views, saying that prophylaxis was generally impracticable The prognosis was not so bad as was alleged by Dr Sturmann, for in the Falkenstein sanatorium 37 per cent. of the cases recovered Tuberculous ulcers of the larynx were to be scraped in like manner with those occurring in other parts of the body and they frequently healed up afterwards

Elimination of Fat by the Skin

Dr LEUBUSCHER (Meiningen) said that the elimination of fat through the skin varied according to the person's age and constitution, being most abundant in the young, but that sex had no influence He had observed that in stout persons more fatty matter made its way through the skin than in those who were lean and he was therefore of opinion that certain relations existed between the formation of fat in the organisation and its elimination by the skin On an average 100 cubic centimetres (about three and a half ounces) were given off in a week, in exceptional cases, however, the amount might be more than 300 cubic centimetres (more than 10 ounces) The quantity was not augmented by muscular exertion and was not affected by atropin, thyreoidin or pilocarpin The nature of the food, however, had a very obvious influence, for when it contained much fat the elimination was increased In acne vulgaris the sebaceous secretion was augmented, in enteric fever tuberculosis, and carcinoma it was diminished

Glycerine in Renal Calculus

Dr HERMANN (Carlsbad) who has already written on the use of glycerine in renal calculus now reported an additional series of 85 cases In 14 cases calculi were passed with relief to the symptoms, in 17 cases calculi were passed without improvement in the patient's general state, in 21 cases the pains disappeared without passage of calculi, and in 33 cases there was no result from the treatment Glycerine did not dissolve the calculi, but by increasing the slipperiness of the mucous membrane of the uropoietic system it facilitated their discharge Very pure glycerine combined with orange syrup must be administered in large doses amounting to 130 grammes (four and a half ounces) Glycerine had no injurious action on the kidneys —Professor VON JAKSCH remarked that large doses of glycerine might produce alterations in the blood and bring about nephritis

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BIRMINGHAM

(FROM OUR OWN CORRESPONDENT)

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Proposed Crematorium

An effort is being made to establish a crematorium in Birmingham. Several meetings have been held, and the usual amount of criticism has been exhibited in the local press The general committee has reported that in its opinion the Manchester buildings, arrangement, and management are superior to those of Glasgow, but the furnace in the latter place is superior, that it is important to procure a site within a convenient distance of the city and to erect handsome and well arranged buildings, and that it would be best carried out by the formation of a small limited liability company with a capital of £10 000 with the understanding that the object would be to further a much needed reform rather than to make a pecuniary profit The medical officer of health Dr Hill, was called upon to bless the project and point out its advantages and the coöperation of the clergy was invited Thus far there seems to be a probability of the undertaking being pursued to a definite conclusion at no distant date

Reception to Nurses

By the kindness of the Lord Mayor and Lady Mayoress an enjoyable evening was spent at the Council House on April

section The first question is the protection at their source of water courses, and the administrative measures necessary for the prevention of river pollution, Dr Thibault (Lille), Dr Launay, and Dr Miquel, reporters Second question household refuse, its collection, transport, and final treatment, sanitary measures to be enforced in houses and towns, M Hudelo and M Petsche, reporters Third question the domestic sanitation of houses, draining into public sewers, and the necessary by laws, M Lacau and M Masson, reporters Fourth question the necessary laws for the disposition, ventilation, and decoration of the interior of dwelling-houses, M Grouvelle and M Pucey, reporters Fifth question the atmosphere of towns, noxious gases, smoke prevention, &c, Dr Armand Gautier, reporter Sixth question urban by laws regulating the construction, preservation, &c, of thoroughfares, M Emile Trélat, reporter Seventh question the sanitation of seaport towns, M Rebuffel (Marseilles), reporter

The Fourth Section (Dr Th Roussel, president, and Dr Deschamp, secretary) deals with the Hygiene of Childhood and Individual Hygiene On the former question Dr Budin, Dr Napias, and Dr Dubrisay are the reporters On physical exercise and cycling Dr Lucas Championnière is the reporter Then there are to be reports on the medical inspection of schools, on dealing with cases of infectious fever in schools, &c, and on the progress of cremation

The Fifth Section deals with Professional and Industrial Hygiene and with Unwholesome Dwellings The president of the committee is M Siegfried and M de Pulligny is the secretary The first question is the prophylaxis of phosphorous necrosis, the actual state of the legislation in various countries on this question, its results, and the further reforms needed, M Courtois Suffit is the reporter Second question prophylaxis in regard to illness and accidents caused through the employment of poisonous substances—mercury, arsenic, lead, copper, &c —in various processes of manufacture, the legislation of different countries on this subject, the results attained and the reforms which are desirable, Dr Layet (Bordeaux) reporter Third question unwholesome dwellings, existing legislation of different countries in relation thereto, its results, and the further laws needed, M Challamel, M de Pulligny, and M Weber, reporters Fourth question legislative limitation of the hours of labour, M Vaillant, reporter

The Sixth Section deals with Military, Naval, and Colonial Hygiene Dr L Colin is the president and Dr Ferrier is the secretary of this section The first question relates to field and temporary hospitals, Dr Richard and Dr Ferrier, reporters The second question is the ventilation of ships, Dr Michel, reporter The third question is on the sanitary precautions necessary in hot climates, Dr Reynaud, Dr Bonvalot, Dr Henry, and Dr Thierry, reporters The fourth question is concerned with the ensuring of a pure water supply in the colonies, Dr Bonnafy reporter

The Seventh Section is devoted to General International Sanitary Measures The president is Dr Proust and the secretary is Dr Mosny Special stress is laid on the first question, comprising the study of the different measures taken and the results actually attained to prevent the spread of tuberculosis in families and communities, Dr Landouzy and Dr Mosny are the reporters Second question the compulsory notification of contagious diseases and the consequent necessity of isolation and disinfection, with the results attained in various countries, reporters, Dr Vallin and Dr A J Martin Third question the various measures enforced for the prevention of syphilis, reporters, Dr Fournier and Dr Bourges Fourth question international measures against yellow fever, reporter, Dr Proust

The Eighth Section or Demographical Division has M Levasseur for president and M J Bertillon for secretary The first question relates to statistics on the consumption of alcohol—what amount of absolute alcohol has been drunk during the last 50 years, what measures have been taken against the abuse of alcohol, and what effect have such measures had on the consumption of alcohol, M Blancheville, reporter Second question the housing of the population—according to existing statistics and census returns what is the distribution of the population in regard to the number of inhabited rooms (a room should be defined as a place large enough to hold a bed—namely, measuring at least two metres by one and a half metres), M Fontaine, reporter Third question the movements of the population in regard to their financial means, M J Bertillon, reporter Fourth question the classification of the physique of conscripts, students, and other adults during the last 20 years, M Longuet, reporter

Early efforts have been made so as to render the discussion on Tuberculosis especially instructive and far reaching Two circulars, in which a great number of questions have been inscribed with blank spaces for the answers, have been prepared and will shortly be despatched to all known authorities in different countries The first deals with general and international hygiene for the prevention of tuberculosis The first questions asked relate to the statistics of tuberculosis during the 10 years from 1888 to 1898, whether during that period tuberculosis has increased or decreased, in what regions was it especially prevalent—among the general population or in hospitals, schools, large offices, railway stations, banks, hotels, barracks, ships, artisans' dwellings, &c Secondly, what measures have been taken to prevent the spread of this disease either by the State, local governments, private individuals or enterprises, &c Thirdly, what have been the results of such measures The second circular deals exclusively with the army and the navy Statistics are requested for the same period, and the details as to whether any particular regiments or services are especially affected For instance, do the cavalry or the infantry, the able bodied seamen or the marines, suffer most from tuberculosis? Again, are recruits or veterans more subject to this disease? Then there are questions in regard to the preventive measures taken, especially in dealing with recruits and their medical examination before they enter the ranks Of course, there are also many questions in respect to the barracks, infirmaries, &c These questions have been very carefully drawn up and if they are as carefully answered a great mass of very useful information will be collected The reporters are Dr Landouzy and Dr Mosny They will group together and analyse the replies and will be able to lay before the Congress a very instructive report, particularly as they are taking time by the forelock and are collecting their information in a systematic manner

Dr A J Martin, who is so well known in connexion with these congresses, is the general secretary of the International Congress of Hygiene and all communications relating to the Congress should be addressed to him at No 3 rue Gay-Lussac, Paris Dr Martin assures me that every effort will be made to print at least the more important reports in all the three official languages and that they will be forwarded to the members of the Congress several weeks before the Congress meets Such reports as cannot be translated will contain at least a summary in the three languages Thus the members will know well in advance what are the principal points raised and what has to be discussed This is by far the best way to ensure order in the debates and to elicit useful information The present description of the subjects to be discussed, being published a year and three months before the actual meeting of the Congress, will serve to give the British members ample time to prepare It will be their own fault therefore if they fail to make useful communications and to distinguish themselves on this auspicious occasion At Madrid it was decided that a British committee should be formed so as to group together the British delegation and to facilitate the journey of the members to Paris It will soon be time for this committee to meet and to get into working order To ensure success it is necessary not to leave such matters to the last moment Our French colleagues in any case are well to the fore Let us follow this good example

Paris, May 7th

THE CONGRESS OF INTERNAL MEDICINE AT CARLSBAD

(FROM OUR BERLIN CORRESPONDENT)

(Concluded from p 1257)

Surgical Operations for Non-malignant Diseases of the Stomach

DR PETERSEN (Heidelberg) gave an account of 77 operations on the stomach performed in the Heidelberg University Hospital Surgical treatment, he said, was always indicated in cases of pyloric stenosis with mechanical insufficiency, of the 57 patients operated on for this condition 40 had suffered from gastric ulcer, eight from cholelithiasis and four from cicatrices produced by corrosive substances In some cases

of gastric ulcer, cholelithiasis, and uncontrollable vomiting there was a possibility that relief might be obtained by surgical means. Operations were performed six times for gastric hæmorrhage. Of the 77 patients eight died, being a mortality of 10 per cent. Previously to 1885 the mortality was 22 per cent. but since that year it had been 2·3 per cent. The causes of this great improvement were that the patients were operated on at an earlier stage than formerly and that better methods were employed. The Murphy button deserved special commendation. The results of gastro-enterostomy were better than those of resection of the pylorus. After operation it was found that dilatation of the stomach usually disappeared somewhat quickly, that the normal motor functions were regained, that the quantity of free hydrochloric acid diminished, and that lactic acid was no longer present. A pylorus-like sphincter sometimes formed at the site of the gastro-intestinal fistula.—Professor EWALD (Berlin) said that he was glad to see surgeons attending medical congresses and communicating their results to the medical branch of the profession.

Diagnosis of Gastric Ulcer.

Dr. SCHUTZ (Wiesbaden) said that certain symptoms produced by some diseases of the colon, such as colitis, or even certain symptoms produced by constipation, were very similar to those of gastric ulcer. The occurrence of hæmorrhage served to confirm the diagnosis of ulcer, but in the absence of hæmorrhage it was possible that the phenomena presented might be accounted for by the conditions above-mentioned. The pain in diseases of the colon and of the stomach was felt as a rule in the pit of the stomach. Pain in the stomach might sometimes be removed by free emptying of the colon. In colitis the quantity of free hydrochloric acid was diminished. By attention to these points patients with doubtful symptoms might sometimes be spared the inconvenience of an unnecessary treatment for gastric ulcer.

Tuberculosis of the Larynx.

Dr. STURMANN (Berlin) expressed the opinion that laryngeal tuberculosis was not a local disease. With few exceptions it did not occur primarily and was seldom confined to the larynx. Surgical treatment as recommended by the specialists was therefore contra indicated in the majority of cases, for it was likely to diffuse and aggravate the tuberculous condition. Surgical treatment in this disease went no further than the relief of symptoms. Hygiene and diet ought to be attended to as in pulmonary tuberculosis. Rational prophylactic measures were very valuable. Laryngeal tuberculosis was as a rule preceded by simple laryngitis, which must be energetically combated. Plenty of nourishing food was essential and sanatogen had been found valuable for such patients. Affections of the larynx ought to be treated like those of the joints by rest, ice, hydropathy or a mild antiseptic. Menthol could be highly recommended for the relief of the pain. Operations, including cauterization, ought to be performed only on robust persons free from lung disease.—Dr. SCHMIDT (Frankfort) opposed those views, saying that prophylaxis was generally impracticable. The prognosis was not so bad as was alleged by Dr. Sturmann, for in the Falkenstein sanatorium 37 per cent. of the cases recovered. Tuberculous ulcers of the larynx were to be scraped in like manner with those occurring in other parts of the body and they frequently healed up afterwards.

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Dr. LEUBUSCHER (Meiningen) said that the elimination of fat through the skin varied according to the person's age and constitution, being most abundant in the young but that sex had no influence. He had observed that in stout persons more fatty matter made its way through the skin than in those who were lean and he was therefore of opinion that certain relations existed between the formation of fat in the organisation and its elimination by the skin. On an average 100 cubic centimetres (about three and a half ounces) were given off in a week, in exceptional cases, however, the amount might be more than 300 cubic centimetres (more than 10 ounces). The quantity was not augmented by muscular exertion and was not affected by atropin, thyreoidin, or pilocarpin. The nature of the food however had a very obvious influence, for when it contained much fat the elimination was increased. In acne vulgaris the sebaceous secretion was augmented, in enteric fever tuberculosis and carcinoma it was diminished.

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BIRMINGHAM

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25th by a large number of nurses Invitations were issued to some 650 nurses, and the members of the City Council, the chairman and secretaries of the various hospitals, and a few private friends were asked to meet them The staffs of 13 hospitals, six district nursing societies, and a number of nursing institutions and training homes were recipients of invitations Music, visiting the Art Gallery, and other entertainments with appropriate refreshments, constituted a most pleasant evening, during which the Lady Mayoress emphasised the interest which she has always so prominently taken in the welfare of nurses and nursing in all its branches

The Royal Society

The friends of Professor B C A Windle, the dean of the Medical Faculty at Mason University College, are very pleased to see his name among the list of nominations for the Fellowship of the Royal Society

May 9th.

MANCHESTER

(FROM OUR OWN CORRESPONDENT)

Care of Pauper Children

THE Oldham guardians decided on May 3rd to take control of the pauper children who had been reared in the workhouse This course has been taken owing to the fact that it is a common thing for parents who have deserted their children to claim them when they reach the age of 16 or 18 years The guardians will no doubt be better able to guide them to a decent course in life than such parents Mr Jenner Fust, the Local Government Board inspector, remarked that the proposal was a very sensible one

Methylated Spirit as Whisky

It is seldom, one would think, that methylated spirit is sold for whisky, but the other week a man described as a hawker was fined at Bolton £51 and costs or six months' hard labour for so doing He must have found it profitable as he had been fined on former occasions £51 and £24, and on three occasions £25 and costs, and had served various long terms of imprisonment It bespeaks an uncultivated taste if he succeeded in palming such stuff on his customers for "fine Scotch,' or an insatiable craving for alcohol of any sort or description One would like to know if there are confirmed methylated spirit drinkers at Bolton or if the effects of taking it have come under the notice of any of the medical men

Poisoning by Ammonia at Stockport

An inquest was held on April 28th at Stockport on the body of a lady, feeble from chronic bronchitis, who got some ammonia to remove stains from a carpet and accidentally inhaled it Her husband, one of the oldest members of the corporation, said that he was certain that she drank none The verdict was "Death from bronchitis accelerated by accidental inhalation of ammonia" It is stated that there have been a number of deaths recently in Stockport from taking ammonia. It is difficult to imagine anything more horrible than the swallowing of ammonia or carbolic acid, and yet the latter, in addition to the accidental deaths caused by it, is among the lower classes one of the favourite instruments of suicide A death from ammonia poisoning took place about a month ago at Guide Bridge A man sent to a shop for a pennyworth of sweet nitre, but ammonia was given by mistake The shopkeeper said that "she kept a general shop and sold sweet nitre, ammonia, and many other articles of a similar nature" and that she understood the boy to say ammonia At the request of the jury she was censured severely and told that they did not believe her evidence It is difficult to ensure care and accuracy in the seller and more difficult to save the buyer of such things from a "general shop" against his own stupidity and carelessness

May 9th.

LIVERPOOL

(FROM OUR OWN CORRESPONDENT)

University College, Liverpool Court of Governors, a New Fellowship in the Medical Faculty

AT a meeting of the court of governors held in the senate room of the College on May 6th Principal Glazebrook made a statement dealing with the work done since the last meeting of the court Referring to the number of medical students he said that in spite of a slight decrease in the total number there had been a very considerable increase in the number of new students—namely, 88 against 71 in the previous term As to the work of the students it was difficult to say very much because only a few of the final examinations had been held Those who knew the work were thoroughly satisfied with the success of the final examinations for the degree of M.D in March last and there was every prospect of a high standard being attained in the other examinations. In regard to the changes in the professorial staff Dr Briggs had been appointed professor of midwifery and gynæcology in the room of the late Dr John Wallace, while Dr Grimsdale had been appointed clinical lecturer on gynæcology Speaking of the position of the various building funds Principal Glazebrook said that plans had been prepared for the extension of the medical school, which would probably cost about £20,000, so that between £5000 and £7000 would still be required before the work could be completed. In regard to the new laboratory in the physics department Mr Alfred Booth had promised £2500 on condition that £7500 additional should be raised Considerable amounts had already been received towards that object and they hoped before long to be able to announce the receipt of the £25,000 required for the work At a meeting of the Medical Faculty held on May 5th it was announced that Dr William Alexander, surgeon to the Royal Southern Hospital, had generously offered a fellowship or studentship in pathological science of the value of £100 a year for five years at least Mr Edward Phillips, the dental surgeon to the Liverpool Royal Infirmary, had also offered a prize of the value of 10 guineas for students in dental science for a term of five years at least

Pathological Diagnosis Society

The second annual report of the society states that the number of subscribers is slightly less than last year—viz, 140 as against 163 The work done, on the contrary, has increased, nearly 600 reports having been sent out In the Thompson Yates Laboratories a special room had been devoted to the work with a laboratory assistant, so that in all urgent cases, as in the bacteriological diagnosis of diphtheria and typhoid fever, a reply can be given within 24 hours Two hospitals—viz, the Liverpool Infirmary for Children and the Royal Albert Edward Infirmary, Wigan—have joined the society during the past year

The Liverpool Chamber of Commerce and the Vaccination Act (1898)

At the monthly meeting of the Chamber of Commerce, held on April 26th, the secretary reported that a letter had been received from the Town Clerk asking, on behalf of the Health Committee of the City Council, for the cooperation of the Chamber in an effort which they were making to secure for Liverpool exception as regards domiciliary visits under the Vaccination Act, 1898 The new procedure was, in the opinion of the Health Committee not suited to the circumstances of Liverpool They therefore wished the Government to consider the case of Liverpool exceptionally and to restore the vaccination stations It was unanimously agreed by the Chamber that the support asked for by the City Council should be granted

May 9th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS)

University of Edinburgh

ON May 2nd the classes for the summer session were opened in the University of Edinburgh The introductory lecture of the newly instituted course in tropical medicine was delivered by Dr Andrew Davidson who has been recently appointed by the University Court as lecturer on that subject Those present were for the most part graduates and senior students who intended to enter the services The lecturer spoke of the importance of this subject, the objects of the course, and the part played by predisposition in determining infection and its influence on the type and severity of the disease The University of Edinburgh sent as large a proportion of its graduates to the tropics as any other medical school in the kingdom, and it had now realised

its duty to them in the matter of providing instruction in the diseases with which they would have to contend in their work in tropical countries

General Council of the University of Edinburgh

The statutory half yearly meeting of the General Council of the University of Edinburgh was held on May 3rd in the Celtic class room of the University In the report of the Finance Committee the committee referred to the Universities Act of 1889 which gave the University Court the power to administer and manage the whole revenue and property of the University, the intention of this arrangement being to relieve the Senatus of all financial administration and thereby to enable the professors to devote all their time to educational work Referring to the matter of financial administration he explained that the committee in no way blamed the Senatus but that they considered it unfortunate that the donors should have so little considered the Universities Act of 1889 as to thrust this work on the Senatus by the terms of their bequests The Finance Committee regretted to have to report that for the first time since 1889 this method of administration had in part been broken through the Senatus having entered on the management of two bequests which had recently been made in favour of the Senatus This departure was unfortunate as setting up a dual financial administration in the University The report went on to state that the appeal which had been made for funds to provide a building for the newly founded chair of public health and the cataloguing of the library had been munificently responded to Since 1889 there had been a large increase in the appointments of university lecturers and assistants The increase in lecturers was, however less than it would be if funds were available In many cases the court had been forced to select men as lecturers who were also assistants to professors This had happened in 21 cases The capital funds in 1897-98 amounted to £687,133, as compared with £675,081 in 1896-97 The total number of matriculated students in 1897-98 was 2780 In moving the adoption of the report Mr Buchan, referring to the question of lectures, pointed out how much more satisfactory it would be had the University funds to enable them so to remunerate the University lecturers as to make those gentlemen independent and to enable them to devote all their time to work in the subject on which they lectured If a man held the two posts of lecturer and assistant to a professor and derived 80 per cent of his income from the assistantship he naturally was obliged to give most of his time to the work which fell to him as assistant

At the monthly meeting of the Faculty of Physicians and Surgeons, Glasgow, held on May 1st, Dr John Dougall of St Mungo s College was appointed examiner in medicine and materia medica for the dental diploma

May

IRELAND

(FROM OUR OWN CORRESPONDENTS)

Guinness s Brewery

DR LUMSDEN has recently been appointed chief medical officer to the immense establishment known as Guinness's Brewery It will be remembered that Their Royal Highnesses the Duke and Duchess of York recently honoured the institution with a visit

Royal College of Surgeons in Ireland

The Court of Examiners for the ensuing year was chosen by election on May 2nd The most important changes were in the examiners in surgery, Mr Henry Gray Croly and Dr F Conway Dwyer having been selected to examine for Fellowship and Letters Testimonial in that subject

Royal College of Physicians of Ireland

At a meeting of the President and Fellows of the Royal College of Physicians of Ireland held on May 5th the following were admitted Fellows —James Byrne Coleman and Francis Charles Martley Dr Martley who is a graduate of Cambridge University recently passed with honours the examination for the degree in State Medicine

Meath Hospital, Dublin

The annual meeting of the friends and supporters of the Meath Hospital and County Dublin Infirmary was held on May 8th, Sir Percy Grace, Bart., occupying the chair The adoption of the report was proposed by Sir William Porter, Bart. who alluded to the expenses which were recently rendered necessary by the requirements of the new operating theatre and the new accident ward Dr J W Moore, senior physician to the hospital and President of the Royal College of Physicians of Ireland, also addressed the meeting

Death of Mr John Eustace, M D Dub , J P

Dr John Eustace, J P., died on May 4th at his residence Limhurst, Glasnevin The deceased, who had reached the age of 73 years, was for a long period well known as an active member of the board of governors of Dramcondra township and also as one of the most experienced of the governors of the Richmond Lunatic Asylum. The funeral which took place on May 8th was very largely attended

Royal Medical Benevolent Fund Society of Ireland

The annual meeting of the Belfast branch of this society was held on May 3rd The gross amount subscribed last year was £71 7s 6d , against £62 10s in the previous year. The number of town and country members remained practically the same as before, but out of 173 members of the profession in Belfast and 92 in the country only 63 and 13 respectively contributed to this fund, which is the only charity in Ireland in connexion with the medical profession. It was stated that no medical man could excuse himself on the plea of not being aware of the existence of the society as on two occasions a circular had been forwarded to them and in addition the collector of the society had waited on them Attention was called in the report to the apathy of the profession towards the society Dr Whitaker was re-elected President and Dr Purdon was re appointed secretary and treasurer

The Bacteriological Treatment of Sewage

A sub-committee appointed by the Joint Town Improvement and Public Health Committee of Belfast have visited various towns in England and submitted a report to the corporation upon the bacteriological treatment of sewage They recommend that a portion of the sewage at the Belfast outfalls should be experimented on with the least possible delay in the hope that a way may be found for the development of this system on a large scale They propose that two beds should be constructed at a cost of £1000 at Sydenham and Greencastle The surveyor of Belfast is to prepare a scheme for dealing bacteriologically with the sewage of these two localities

The Ulster Medical Society

At the monthly meeting of this society held on May 4th Dr Dempsey read a paper on Pericarditis with Illustrative Cases, one of which was of special interest inasmuch as he had aspirated the pericardial sac with success In the subsequent discussion Dr Calwell, Dr McCaw, and Dr J A Lindsay took part Dr Dorman read notes on a case of Gastric Tetany and notes on a case of Acute Circumscribed Œdema Dr Morrow, Dr Calwell, Dr Dempsey, Dr McCaw, and Professor Byers made remarks on the cases

The Belfast Board of Guardians and Consultants' Fees

It seems that the Belfast Board of Guardians have suggested to the Local Government Board to arrange that in future if any of their dispensary medical officers should need the assistance of a consultant the fee is to be one guinea. Such cases are usually obstetric and operative and hitherto the minimum fee has been two guineas The Ulster Medical Society at their meeting on May 4th passed a resolution protesting against this extraordinary proposal and it is to be sent to the Local Government Board

The Belfast Water Bill

This Bill, the object of which is to confer power on the Belfast Water Commissioners to extend their district of supply, to make further works, and to purchase a large portion of their catchment areas so as to prevent the risk of pollution of the city water supply, came before the House of Commons Committee on May 3rd and 4th At the present time the Commissioners are pushing on with their scheme to bring a pure water supply from the Mourne Mountains and in about two years a small supply will be available from this district which is 40 miles from the city of Belfast There are now two catchment areas (one at Carrickfergus and the other at Stoneyford) from which the present water supply is obtained Within these catchment areas there are farms and hence the risk of contamination of the water supply

both directly from the farms as well as indirectly by manure brought from Belfast and spread over the fields there During the past two years there has been a severe outbreak of typhoid fever in Belfast and last year the death rate from that disease rose to 2 9 per 1000 Experts were asked by the Water Commissioners and the city corporation to look into the cause of the epidemic and although they differed on some points they were both of opinion that it might have been introduced by the water supply, while admitting the insanitary condition of the low lying drains of Belfast Further, it was distinctly proved that there were cases of typhoid fever on the catchment areas themselves Under these circumstances the Belfast Water Commissioners decided to purchase the lower part of the catchment area so as to preserve their reservoirs from pollution, this meant buying up 4186 acres in which there were 188 dwelling houses and three schools with a population of 1186 persons The only opposition offered was from the farmers and occupiers of land in the Carrickfergus district After hearing evidence (expert, sanitary, and medical) the Committee decided that the preamble of the Bill was proved, but that a clause should be added securing to the persons whose holdings are required by the Commissioners 18 months' notice before they are dispossessed of their land under the powers of the Bill This concession has, however, been since abandoned, the tenants being advised to give up their holdings as soon as possible and to treat without delay for compensation with the Water Commissioners

Presentation to Mr R P Byrne

A presentation was made to Mr R P Byrne on May 6th by the students of the North Infirmary, Cork, on the occasion of his severing his connexion with the hospital as house surgeon The presentation consisted of a surgical dressing-case, a midwifery bag, and a hypodermic case The chair was occupied by Mr Denis Donovan, physician to the hospital, and Mr J P Higgins, M A, read the address which referred to the cordial relations which had always subsisted between Mr Byrne and the students The chairman and Dr N J Hobart, senior surgeon to the hospital, also spoke in high terms of the manner in which Mr Byrne had discharged his duties, and congratulated him on his recent appointment as medical officer of one of the city dispensaries Mr Byrne suitably replied Some days previously the sisters of charity in charge of the hospital presented him with a tea service and he was the recipient of a solid silver cigarette case and an umbrella from the nursing staff

Dr Power has been appointed house surgeon to the South Infirmary, Cork

May 10th.

PARIS

(FROM OUR OWN CORRESPONDENT)

The Treatment of Appendicitis

THE discussion upon the treatment of appendicitis which has been going on at the Society of Surgery during the past three months has just come to an end, possibly somewhat to the relief of the medical world Every surgeon successively laid before the meeting his views upon the origin and course of appendicitis, together with that most important point, the conditions which in his opinion made it necessary to interfere by operation or the reverse At the same time the physicians discussed the matter at their own particular society—namely, the Hospitals Medical Society—and the question was also argued by both physicians and surgeons at the Academy One rather remarkable result was arrived at the physicians, with Professor Dieulafoy at their head, insisted that appendicitis ought to be treated at the earliest possible moment by operation, while the surgeons, led by Professor Tillaux, considered that in many cases a waiting policy and medical treatment were quite sufficient and that this was especially the case in a first attack Professor Dieulafoy says that there is no such thing as medical treatment of appendicitis Many of the younger surgeons, howev[illegible] [illegible]ported the opinion of Professor Dieulafoy [illegible] (FROM OUR [illegible] day in this lo[illegible] appear to have won the day in defir[illegible] Society of Surgery has not yet the [illegible]versity College, Liver[illegible]uncement on the matter, but at fr[illegible] *Fellowship in* [illegible]th a communication was received [illegible]lly reflects the general opinion

AT a meeting of the cou[illegible]ng precepts (1) there is no room of the College on [illegible]icitis, (2) in acute cases operate as soon as possible after the diagnosis is made, (3) in doubtful cases it is better to operate, (4) in subacute cases it is possible to wait and operate *à froid*—i.e., between the attacks—but most of the members of the society prefer to operate at once, (5) suppurative appendicular peritonitis demands instant operation, (6) in slight cases it is less risky to operate at once than to wait and operate *à froid* and diagnosis especially in the early stages is anything but easy, and (7) the steps of the operation must vary according to the needs of each particular case, resection of the appendix should be practised in every case where the search for it does not involve much injury to the tissues The possibility of a ventral hernia (*éventration*) after the operation *à chaud*—i.e., in the acute stage—is not a reason for putting off operation, for the risk of this occurring is less than the risks from waiting M Poirier added that if any definite rules for the conduct of a case of appendicitis had been arrived at the credit was due to Professor Dieulafoy

The International Congress of the Medical Press

The Organising Committee of the International Congress of the Medical Press which will be held in Paris during the year 1900 met for the first time in the Exhibition Buildings on April 20th and proceeded to elect its officers as follows—President, M Cornil, Professor at the Faculty, Member of the Academy of Medicine and Senator Vice-Presidents, M Lucas-Championnière, surgeon to the hospitals, Member of the Academy, editor of the *Journal de Médecine et de Chirurgie Pratiques*, and Dr V Laborde, in charge of the physiological work at the Faculty of Medicine, Member of the Academy and editor of *La Tribune Médicale* Secretary, Dr Blondel, in charge of the laboratory of the Charité Hospital and editor of the *Revue de Thérapeutique*

Obituary

Dr Le Sourd, editor of the *Gazette des Hopitaux*, which post he had held for 30 years, has recently died, aged 75 years

Notes on News

The old Obstetrical and Gynæcological Society of Paris has just been broken up A purely obstetrical society was formed some months ago out of the members of the old society under the presidency of Professor Budin A purely gynæcological society is also in process of formation. Besides these there was founded some two months ago a society of obstetrics, gynæcology, and pediatrics under the presidency of Professor Pinard There is also a society which deals with nothing but pediatrics, and a second one is in process of formation comprising members who were unwilling to belong to the other one —The influenza epidemic is almost at an end Only 31 deaths were attributed to this cause during the past week On the other hand typhoid fever seems to be increasing and 21 deaths occurred from this disease last week, the mean number at this time of the year being six The new cases reported to the Prefecture of Police numbered 108 —The hospital ship *St Paul* which was launched last year to accompany the fishing fleet (*pêcheurs d'islande*) was wrecked 15 days ago This is the second hospital ship sent out by the Société des Œuvres de Mer The first ship, the *St Pierre*, was wrecked last year The society has now decided to build no more sailing hospital ships but only steamers —Dr Duclaux director of the Pasteur Institute, and Dr Grimaux, *agrégé* Professor of Chemistry at the Faculty of Medicine, have been prosecuted by the Correctional Tribunal as being members of the League of the Rights of Man which was founded in favour of Dreyfus and have, as have many members of previous leagues, been fined, time being given for payment

May 9th

BERLIN

(FROM OUR OWN CORRESPONDENT)

Intemperance in Relation to Climate and Season

AT a recent meeting of the Berlin Society of Public Health Dr Baer, chief medical officer of health to the Ploetzensee prison, read a paper on the Relations between Alcoholism and the Time of Year Meteorological conditions, he said, had a marked influence on the prevalence of alcoholism It was an established fact that more spirits were consumed in winter than in summer and that the use of alcohol increased as one proceeded from the equator to the poles On this account it might perhaps be supposed that pathological conditions due to alcoholism were most prevalent during the

cold season of the year, but this inference would not be in accordance with the facts, for it has been proved statistically that disease attributable to intemperance is most common in the summer It is also known that the indiscriminate use of alcoholic liquors is much more injurious in the tropics than in mid-European climates, the degeneration of certain native races in the tropics being due to the ravages of alcoholism Statistical returns from Stockholm, St Petersburg, Munich, and Paris have shown that delirium tremens is at its maximum of frequency in July and August and at its minimum in February and March The same fact was recognised in Berlin, where from 1879 to 1898 not less than 15 997 cases of delirium tremens were treated in eight of the larger hospitals Some writers were of opinion that the prevalence of delirium tremens in the summer months was due principally to the better wages earned in summer by working people who therefore had at that time more money to spend in drink Dr Baer, however, argued that the brain and the entire organism is less resistant to alcohol in summer than in winter, a fact which helps to explain why mental disorder, suicides, and acts of violence are most frequent in summer There is of course an increased consumption of fluid in summer time, and it is greatly to be desired that the demand should be met by the introduction of a refreshing and palatable substitute for alcoholic liquor Dr Baer recommended a mixture of cold tea and lemon juice

Treatment of Hydrophobia

At a meeting of the above society Professor Pfeiffer made a statement relative to the treatment of hydrophobia as conducted in the Hospital for Infectious Diseases He said that rabies was not so rare in Germany as it was generally believed to be In the interior of the empire it has nearly disappeared in consequence of the strict enforcement of the muzzling order, but in the eastern districts, especially in those near to the Austrian and Russian frontiers, a considerable number of persons have been bitten by mad dogs Persons have also been bitten by other animals which had previously been bitten by mad dogs One or two months generally elapse between the bite and the first appearance of the symptoms, so that ample time is available for the giving of preventive injections The earlier the injection the better are the results When the virus has reached the brain and the medulla a fatal issue is certain The method of injection adopted in Berlin is similar to that of the Pasteur Institute at Paris The injections have hitherto been successful in every instance From July, when the rabies department was opened, to the end of 1898 there were 137 patients treated 94 men and 43 women In 92 cases the wounds were inflicted on the hands and the head, where the bites are more dangerous than on parts protected by clothing In 107 cases the heads of the animals by which the patients were bitten were sent to the institution and on being there submitted to examination it was found that 95 of the animals showed evidence of hydrophobia.

Quintuple Birth

A case of quintuple birth is reported by Dr Bernheim of Philadelphia, U S A , in the *Deutsche Medicinische Wochenschrift* This rare event happened in Mayfield Kentucky, Dr Mathews being the medical man in attendance The children were of the male sex and were all born alive The mother was delivered within an hour, the children being born one after the other at intervals of 10 minutes Their weight was from four to five English pounds and they appeared quite healthy there being no obvious cause for their deaths They died, however, the first in four days the second in 11 days the third and fourth in 13 days and the fifth in 14 days. There were five complete placentæ conjoined to form one large mass with five umbilical cords The mother was confined within the eight month of pregnancy and made a slow recovery According to Professor Schroeder's text-book twins occur once in 89 births, triplets once in 7910 births and quadruplets once in 371,126 births

May 9th.

ROME

(FROM OUR OWN CORRESPONDENT)

The Approaching International Congress on Tuberculosis at Berlin

IN no European country are the proceedings of this great meeting—one of the most important of the current year, and indeed, of the closing century—awaited with more anxiety than in Italy, for there, socially and clinically, tuberculous phthisis has ever been the gravest of problems Her contributions to its etiology or pathogenesis are, as the recent studies of Bizzozzero remind us neither few nor unimportant, but it is in the domain of treatment, particularly in the form of sero-therapy, that her work has been most prolific and suggestive, if not conclusive Readers of THE LANCET to whom from time to time the several stages of that work have been submitted will, therefore, understand not only the urgent terms in which the President of the Congress, Professor Ernst von Leyden, has invited the leaders of the profession in Italy to take part in its discussions, but also the alacrity, no less impressive, with which those leaders have responded to his invitation Dr Baccelli, a past master in intra thoracic disease and its therapeutics, will, I believe, be the guest of Professor von Leyden during the sittings of the Organising Committee, so as to assist by counsel or by criticism in the preparation of the programme and in the drawing up of the agenda paper

The Latest Contribution to the Therapeutics of Tuberculosis

At Palermo, Dr Vincenzo Cervello, professor of pharmacology in the University, has just communicated to the Accademia delle Scienze Mediche, of which he is president, an elaborate report of 26 cases of carefully diagnosed phthisis pulmonalis treated by him in the Guadagna Hospital for Consumption. Inhalations of "formalina," entering largely into a medicated vapour to which he has given the name of "gazolo," were tried for the first time on Jan 15th on the 26 patients referred to In 19 of them at varying intervals, the inhalations induced a return to the normal temperature, coincidently with the cessation of the pyrexia the cough and the characteristic rales ceased and from the sputum the tubercle bacillus had disappeared At a final consultation with his colleagues 10 of the patients were pronounced cured and nine progressing towards recovery, of the other seven three were distinctly improved, two were stationary, and two died These latter, when admitted to hospital were found to be "in condizioni gravissime." On concluding his report Professor Cervello introduced the 10 *guariti* to the Accademia All of them looked healthy, "con un aspetto floridо," and on examination they were found to be absolutely free from the characteristic marks of tuberculosis These results have so far satisfied Professor Cervello that he is now following up his "gazolo" treatment on a scale sufficient to justify a sound clinical induction, for which with commendable munificence a Palermitan banker (I may give his name, Signor Florio) has placed at his services an ample sanatorium equipped up to date, and has also founded "Un Istituto Cervello," on the model of the Pasteur Institute in Paris, the whole at a cost of 5,000,000 lire (£200,000)

May 6th.

Medical News.

UNIVERSITY OF DURHAM —At the Convocation held on April 29th the following degrees and diploma were conferred —

Doctor in Medicine.—Bertram Addenbrooke, M.B. B.S Durh., Alexander Baker B.A. Paris, M.B., B S Durh. Norman Bennett, M.B. B.S Durh Charles Hilary Bryant, M.B. B.S. Durh Ramsay Lamy Daly M.B. B.S Durh (*in absentia*) William Ralph Dix, M.B., B.S Durh. Harvey Francis, M.B B.S. Durh and John Peel Sparks M.B B.S. Durh.

Doctor in Medicine (Practitioners of Fifteen Years' Standing).—Thomas William James Allen, M.R.C S Eng L.R.C P Lond Frederick Augustus Newton Bateman, M.R.C.S Eng., L.R.C.P Lond. L.S A. William Fearnley L.R.C S Edin. William Thomas Freeman, M.R.C.S Eng., L.R.C.P Lond., William Makeig Jones M.R.C.S Eng. L.S.A., D P.H. Camb. Alexander Lane, M.R.C S Eng. L.S.A., F R.C.S. Irel. Henry Cripps Lawrence M.R.C.S Eng., L.R.C.P Lond. Sandford Scobell Lessey M.R.C.S Eng., L.R.C.P Lond. Thomas Lettis, M.R.C.S. Eng. L.S.A. Leonard Portal Mark, M.R.C.S Eng., L.R.C.P Lond., L.S.A. William Slater M.R.C.S Eng. L.S.A. and Frederick Thomas Thistle, M.R.C S Eng., L.R.C.P Lond.

Bachelor in Medicine (M B)—Ernest Castleigh Bailey L.S A., King's College, London James William Hugh Boyd, College of Medicine Newcastle-upon Tyne Robert Tilbury Brown, M.R.C.S. Eng., L.R.C.P Lond. Guy's Hospital Thomas Ponsford Cann and Henry Edward Davison, College of Medicine, Newcastle-upon-Tyne Herbert William Dudgeon M.R.C S. Eng. L.R.C.P Lond. Guy's Hospital Selina Fitzherbert Fox, London School of Medicine for Women James Andrew Hartigan College of Medicine, Newcastle-upon-Tyne and Trinity College, Dublin Lawrence Fielder Hemmans, Douglas Hethcote and Ernest Inman College of Medicine, Newcastle-upon Tyne Samuel Percy Johnson, Mason

College, Birmingham James McConnell and James Milligan, College of Medicine, Newcastle-upon Tyne, Herbert Robert Cambridge Newman, M.R.C.S. Eng, L.R.C.P Lond, University College, Bristol Guy Brougham Picton, College of Medicine, Newcastle-upon Tyne Bertram Crossfield Stevens, M.R.C.S Eng, L.R.C.P, L.S.A., St. Thomas's Hospital Arthur Wren Tuxford, St. Mary's Hospital Ralph Harry Vincent, M.R.C.S. L.R.C.P St. Bartholomew's Hospital and Thomas Blandford Watson College of Medicine, Newcastle-upon Tyne.

Bachelor in Surgery (*B.S.*).—Ernest Castleigh Bailey, L.S.A., King's College, London James William Hugh Boyd, College of Medicine, Newcastle-upon-Tyne Robert Tilbury Brown M.R.C.S Eng. L.R.C.P Lond. Guy's Hospital Thomas Ponsford Cann and Henry Edward Davison, College of Medicine, Newcastle-upon Tyne Herbert William Dudgeon, M.R.C.S Eng L.R.C.P Lond., Guy's Hospital, Selina Fitzherbert Fox London School of Medicine for Women James Andrew Hartigan, College of Medicine Newcastle-upon Tyne and Trinity College, Dublin Lawrence Fielder Hemmans, Douglas Hethcote, and Ernest Inman College of Medicine, Newcastle-upon Tyne Samuel Percy Johnson, Mason College, Birmingham James McConnell, James Milligan, and Guy Brougham Picton College of Medicine, Newcastle-upon-Tyne, Bertram Crossfield Stevens, M.R.C.S., L.R.C.P., L.S.A. St. Thomas's Hospital Ralph Harry Vincent, M.R.C.S L.R.C.P St. Bartholomew's Hospital and Thomas Blandford Watson, College of Medicine, Newcastle-upon Tyne.

Bachelor in Hygiene (*B Hy*).—Bertram Addenbrooke, M.D B.S. Durh., and William Henry Rowell, M.D B.S Durh

Diploma in Public Health (*D P H*)—John Charles Davies, M.R.C.S Eng, L.R.C.P Lond. L.S.A.

UNIVERSITY OF CAMBRIDGE.—At the examination for the degree of M.C., Easter Term, the following candidate was successful —

J B Hall, M.A. Pembroke

At the third examination for medical and surgical degrees, Easter Term, the following candidates were successful —

Part I (*Surgery and Midwifery*)—R. G Abercrombie, B.A. Caius, W L Ascherson, non-collegiate F A. Bainbridge B.A., Trinity H. P Bradley B.A., Caius W P S Branson B.A. Trinity W E. Burnand, Jesus J P Candler B.A. Corpus Christi A. E. Carver, M.A. and H Edmondson, B.A., Clare H St. C Elliott Trinity F H Ellis, B.A. Caius F C Eve, B.A. Emmanuel L. S. Gaskell, M.A. Christ's T Gillespie, B.A. St. John's D G Hall, B.A. Emmanuel E. W Hedley, B.A., King's A. Killick, [illegible] Downing J B Linnell, B.A. H Selwyn T Maunsell-Smith, [illegible]wning H. N Matthews, B.A., St. John's W H. Maxwell [illegible]rinity J A. Nixon, B.A. Caius S V Pearson B.A. [illegible]manuel A. C Pearson B.A. Sidney Sussex J H. Philbrick, B.A., Trinity, J G Taylor B.A. King's B. R. B. Truman B.A. Trinity Hall; R. A. Walker B.A. Clare R. F C Ward, B.A. St. John's D P Watson, B.A. Trinity, L. Wilkin, M.A. Pembroke and W M. Willoughby, B.A., Caius

Part II (*Medicine &c.*)—H F Bassano M.A. Trinity G Browse, M.A., Clare H. N Clarke, B.A., Trinity S. E. Dore, B.A. St. John's F H Ellis, B.A. Caius J H. Fryer B.A., Christ's H. A. Gaitskell, M.A Clare J R. Garrood, B.A. St. John's K. R. Hay, B.A. Caius J E Helm, B.A., Magdalene R. J [illegible]ton Smith, M.A. St. John's E R Hunt, B.A. Trinity J H [illegible] B.A. B K. Le Fleming, B.A., and T A Mayo, B.A. Clare [illegible]Parker, B.A., Emmanuel S B. Reid M.A., and F A. Rose [illegible], St. John's C D Somers, M.A., Pemproke, and F G Stacey B.A. F W Sumner B.A. and J H Tallent, St. John's.

[illegible]rofessor Sims Woodhead announces an inaugural lecture [illegible] the Relations of Pathology to Modern Medicine for [illegible]ay 23rd, at 2 30 P M The new regulations permitting [illegible]asters of Arts who are legally qualified surgeons to [illegible]roceed to the degree of Master of Surgery have been [illegible]pproved by the Senate

FOREIGN UNIVERSITY INTELLIGENCE—[illegible]reiburg Dr Pfister has been recognised as *privat-docent* [illegible] Psychiatry —*Helsingfors* The Chair of Physiology has [illegible]een vacated by the resignation of Dr Conrad Hällsten —[illegible]*rague* Dr Minkowski of Strasburg is to be offered the [illegible]nair of Experimental Pathology, vacated by Dr Knoll, who [illegible]oes to Vienna The late Professor Neureutter has left a [illegible]egacy of £10,000 to the new children's hospital —*St Petersburg Military Medico-Chirurgical Academy* Dr Brusianin [illegible]as been recognised as *privat-docent* of Hygiene and Dr [illegible]ariski as *privat-docent* of Surgery

THE LATE DR D A. MACCARTHY—Dr Denis [illegible]ugustus MacCarthy died at his residence, West Allington, [illegible]ridport, on May 1st The deceased received his medical [illegible]ducation at Dublin and Edinburgh He qualified as [illegible] R C S and L M Edin in 1859, L R C P Edin in 1863, [illegible]nd that this [illegible] R C S Edin in 1882, graduating as M D [illegible]Professor Dieulafoy Before settling in Bridport Dr MacCarthy [illegible]nedical treatment [illegible]n in the Royal navy and was formerly [illegible]urgeons, howev[illegible] the Royal Marine Infirmary, Woolwich [illegible]Dieulafoy [illegible] (FROM OUR [illegible]tensive practice in Bridport where [illegible]his lo[illegible] His death occurred in a very [illegible]defi[illegible]sited a patient in company with [illegible]he *University College, Liver*[illegible]d upon returning home he was [illegible] *Fellowship in* [illegible]n a few minutes He has left a [illegible]ter, for whom much sympathy [illegible] meeting of the cou[illegible] [illegible]e on[illegible]

ROYAL ALBERT HOSPITAL, DEVONPORT.—A scheme has been prepared for extending and improving the Royal Albert Hospital, Devonport, at an estimated cost of £4000

POPULATION OF BRISTOL.—The boundaries of the city of Bristol were again enlarged on Jan. 1st and the population is now estimated to amount to 320,911 persons at the middle of this year

MEDICAL MAGISTRATES.—The names of Dr William Dobie, Mr John Patrick O'Connell, and Mr Edward Chaffers have been placed on the Commission of the Peace for the borough of Keighley

LONG TENURE OF AN APPOINTMENT.—At the meeting of the Frome Board of Guardians held on May 2nd Mr Edmund Cockey, M R C S Eng, L S A, resigned the post of medical officer to the Frome Union Workhouse, an appointment which he had held for the past 55 years

BRISTOL LUNATIC ASYLUM.—At the close of 1898 there were 773 patients in the asylum (375 males and 398 females) The extension of the asylum buildings is nearly completed and it is hoped that part will be ready for occupation early in the autumn

FUNERAL OF MR G J HINNELL.—Mr George John Hinnell, M R C S Eng, L S A, of Bury St Edmunds, who died on April 22nd in his seventy fifth year, was laid to rest in the cemetery on May 2nd The funeral was largely attended and in the town many blinds were drawn down and shutters closed

MEDICAL DEFENCE UNION.—The following officers of the union have been re-appointed for the current year —President Dr W S A Griffith Treasurer Dr J A Masters Honorary Secretary Dr Campbell Pope, General Secretary Dr A G Bateman The following members have been elected Vice-Presidents of the Union and together with the executive, officers, and elected members form the Council of the Union Mr Gunton Alderton, Mr C A Ballance, Mr Edgar Barnes, Dr James Barr, Mr James Bisshopp, Mr A H Dodd, Dr Lovell Drage, Mr Samuel Evans, Dr W A Elliston, Dr J S Ferris, Mr E Climson Greenwood, Dr W P Herringham, Surgeon-General C M Jessop, Dr J A Masters, Dr Arthur Luff, Dr C H Milburn Mr Marmaduke Sheild, Dr Frederick Nicholls, Dr Edward Nix, Dr Reginald Pratt Dr F A. Purcell, Mr Prior Purvis, Dr Walter Rigden, Dr R. Saundby, and Dr F J Wethered Application forms, reports, and all information concerning the union can be obtained from the general secretary at the registered offices, 4, Trafalgar square, W C

FREEMASONRY —*Rahere Lodge, No 2546*—An ordinary meeting of the Rahere Lodge, No 2546, was held at the Restaurant Frascati on May 9th, W Bro T G A Burns, W M in the chair Bros Tucker, Lewis, and Kennedy were admitted to the third degree, Bro Stack was admitted to the second degree, and Mr C J Heath was initiated into Freemasonry Bro R. J Reece, M D, was elected W M for the ensuing year W Bro Godson was re elected treasurer and Bro Madden was re-elected tyler It was decided that for the present no steps should be taken to found a R A Chapter in connexion with the Lodge 40 members afterwards dined together and during the evening a wedding present, subscribed for by some members of the Lodge, was presented to W Bro Burns

DEATHS OF EMINENT FOREIGN MEDICAL MEN —Dr Brasseur, *Chef de Service* in the Schaerbeek Hospital and a member of the staff of the *Presse Médicale Belge*, at the age of 50 years —Dr Carlo Minati, formerly Professor of Midwifery and Gynæcology in the University of Pisa —Dr Friedrich Heinrich Georg Birnbaum, for many years Director of the Cologne Midwives' Institute —Dr Jonquière, formerly Professor of Materia Medica in the University of Berne —Dr Henry Hover Wright, formerly Lecturer on Medical Therapeutics in the Toronto School of Medicine —Dr G M. Herzenstein, formerly *privat-docent* of Medical Geography and Statistics in the Military Medico-Chirurgical Academy, St Petersburg —Dr Anastasios Zinnis, Professor of Children's Diseases in the University of Athens —Dr Ramon Félix Capdevila of Ferrer, formerly Professor of Clinical Medicine in the University of Madrid

SUSSEX COUNTY HOSPITAL.—The opening of the new buildings for the nurses will take place at the Sussex County Hospital on May 13th at 3 30 P M and the hospital will be open for inspection from 3 P M to 5 P M Sir Henry Harben, a former president of the hospital, will preside on the occasion

THE ROYAL LONDON OPHTHALMIC HOSPITAL — Their Royal Highnesses the Duke and Duchess of York have consented to open the new building of the Royal London Ophthalmic Hospital on Monday, June 26th This hospital was founded in 1804 and is generally known as Moorfields Eye Hospital The new hospital is in City road, about one mile from the present site in Blomfield street. Provision is being made for 40 additional beds and for a much larger out-patient department The hospital at present relieves over 400 cases a day

ROYAL MINERAL WATER HOSPITAL, BATH —The annual meeting of this institution was held on May 1st under the presidency of General Mainwaring The report showed that during the past year 1350 patients had been admitted, the largest number in the history of the hospital, the average number in the hospital was 150 and the average stay of each was 40 days The expenditure amounted to £5514 and exceeded the income by £142. The balance in hand was £527 Colonel Vaughan was elected president for the ensuing year

LITERARY INTELLIGENCE—Messrs Sampson Low Marston, and Co are issuing immediately a work which has already become known as a text book for teachers of physical training both in this country and America, though no English edition has hitherto been published This is 'The Handbook of Medical Gymnastics' by Dr Anders Wide who is director of the Gymnastic Orthopædic Institute at Stockholm In addition to the ordinary Swedish drill exercises Dr Wide has written a section describing the treatment of numerous ailments of the muscles by means of appropriate exercise locally There are nearly 100 illustrations in the book

THE LATE DR J EADIE—Dr John Eadie died suddenly from syncope at his residence, West Coker, Yeovil, on May 2nd. The deceased received his medical education at Queen s College, Belfast, and graduated as M D of the Royal University of Ireland in 1879, a year later he obtained the qualifications of L.R.C S and L.M Edin Dr Eadie, who had been in practice at West Coker for about 15 years, was medical officer and public vaccinator for the second district of the Yeovil Union and was very popular in the district Although only 43 years of age at the time of his death he had been in failing health for some months He has left a widow and three children

WHITSUNTIDE ON THE CONTINENT—Cheap tickets available for eight days will be issued to Brussels, May 18th to 20th inclusive and May 22nd, via Harwich and Antwerp Passengers leaving London in the evening reach Brussels next morning after a night s rest on board the steamer For visiting the Hague, Amsterdam, Utrecht, and other parts of Holland the Rhine North and South Germany and Bâle for Switzerland, special facilities are offered via the Great Eastern Railway Company s Royal Mail Harwich Hook of Holland route, through carriages being run to Amsterdam and Berlin, Cologne and Bâle Restaurant cars are run on the North and South German express trains The General Steam Navigation Company s passenger steamers will leave Harwich on May 17th and 20th for Hamburg, returning on May 21st and 24th

THE FRENCH HOSPITAL AND DISPENSARY—The thirty first annual dinner on behalf of the funds of this institution took place on May 6th at the Hotel Cecil M Paul Cambon, the French Ambassador being in the chair, supported by the Lord Mayor and Sheriffs and by many members of the *corps diplomatique* The chairman said that he had had an opportunity of inspecting the hospital and had been greatly impressed by the ample provision for the care of the sick He also spoke in terms of commendation of the convalescent home which had been recently opened at Brighton in connexion with the hospital The Italian Ambassador pointed out that the hospital received not only French sufferers but sufferers of all nationalities He quoted the saying of a certain celebrated lady to the effect that the secret of not growing old was study, exercise, and the love of one's neighbour, and in the interest they all showed in the last he urged that they at any rate ought never to grow old During the evening subscriptions and donations were announced amounting to £3200 The musical arrangements were under the direction of Chevalier Tito Mattei who was assisted by Mdlle Hélène Michaëlis, M J Thomas, and Signor Giuseppi Maggi

THE MEDICAL GUILD, MANCHESTER—At the quarterly meeting held on April 28th, Professor J Dixon Mann, M D St. And, F R C P Lond, being in the chair, the following resolutions were passed unanimously —

1. *Raising the Standard of Preliminary Education.*—The Medical Guild desires (1) to place on record its appreciation of the recent action of the General Medical Council in raising the standard of preliminary education and (2) to respectfully urge the opinion that a still higher standard would further tend to raise the status of the profession collectively and as individuals and to promote the public welfare.

2. *Medical Aid Associations*—(a) The Medical Guild having had its attention called to the methods pursued by certain industrial insurance companies which combine medical aid work with ordinary life insurance, hereby expresses the opinion that it is inimical alike to the public weal and to the interests of the medical profession for practitioners to give their services to such companies in the furtherance of medical aid." The guild is also of opinion that the serious attention of the General Medical Council should be given to the matter (b) That copies of the above resolution be sent to the General Medical Council and to the direct representatives on that Council.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS

Seats for Shop Assistants

THE Bill which passed the House of Commons for the provision of seats for shop assistants in Scotland was rejected on the second reading in the House of Lords. A Bill on the same lines with reference to England and Ireland has been introduced into the House of Commons by Sir John Lubbock, but after the fate of the Scottish Bill in the House of Lords it is not likely that it will be pressed.

The Health of the Troops in Natal.

In the House of Lords on Thursday May 4th, Viscount CLIFDEN raised the question of the sanitary condition of the military station at Ladysmith in the colony of Natal and the health of the troops there — The Marquis of LANSDOWNE, Secretary of State for War in his reply, confessed that the health of the troops left much to be desired. He had made inquiries into the matter but he could not find that the climate of Ladysmith, taking one part of the year with another could be described as a bad climate, though there were undoubtedly seasons of the year when the weather was both hot and damp, and when that most terrible of scourges, enteric fever became very prevalent amongst the troops. They had already done something to improve the sanitary conditions. They spent last year on the improvement of the huts a sum of about £8000. This year they were spending a further sum of about £15,000 upon the accommodation for the troops in Natal, a part of which would be spent at Ladysmith. Altogether they had spent at Ladysmith no less than £53,000. He had received a very valuable report from the general officer commanding the troops in South Africa in which a number of practical and well-considered suggestions were made. One of these was to put the troops in camp during part of the year upon healthier ground, and a site had been selected which he believed was something like 5000 feet above the sea level. The general officer called attention to the surface draining and the desirability of improving the water-supply and hospital accommodation, and these and other matters would receive the very earnest attention of the War Office.

Preservatives in Food.

Mr CHAPLIN has made it known that the inquiry into the question of food preservatives will be a departmental inquiry conducted under the auspices of the Local Government Board.

HOUSE OF COMMONS.

THURSDAY MAY 4TH.

Vaccination Questions

Mr R G WEBSTER asked the President of the Local Government Board whether his attention had been called to the fact that, during the present small-pox epidemic in Hull out of 25 cases admitted to the hospital (of whom three died) all the cases were of unvaccinated patients, and if the proportion of unvaccinated persons was large in the Hull district.—Mr CHAPLIN According to the latest information which I have received it is not the fact that during the present small-pox epidemic in Hull all the cases admitted to the hospital—which were 25 and not 25—were unvaccinated. 19 had been vaccinated and the medical officer of health reports these cases to be of a modified character and that none had died. The remaining seven were unvaccinated of these four have died. I have no means of estimating the proportion of unvaccinated persons of all ages in Hull but during the last five years for which returns have been received some 20 per cent

of the children whose births were registered in the two Unions in which Hull is comprised and who survived when the returns were made were then unvaccinated.

Sir WILLIAM PRIESTLEY asked the President of the Local Government Board whether it was true that in Ipswich and other localities where previously there had been great opposition to vaccination the cases of vaccination had notably increased since the passing of the Act of last year, and that many parents who had been persuaded to apply for certificates of exemption had not presented them to the vaccinating officer but had subsequently had their children vaccinated.—Mr CHAPLIN There is distinct evidence from reports that have been submitted to me that in a number of localities where previously there had been a great amount of default under the Vaccination Acts, the number of vaccinations performed since the new Vaccination Act came into operation on Jan. 1st last has been in excess of that for any corresponding period in recent years. The case of Ipswich to which my hon friend refers is one in point. There the average quarterly number of vaccinations performed by the public vaccinator during 1897 and 1898 was only 33, whereas in the first quarter of the present year the number vaccinated was 198. It is also true that in certain cases parents who on the passing of the Act of 1898 obtained certificates of exemption on the ground that they conscientiously believed that vaccination would be prejudicial to the health of their children have entirely on their own initiative procured the vaccination of those children.

Mr COGHILL asked the Home Secretary whether he would bring in a Bill to enable magistrates who have a conscientious objection to grant certificates of exemption from vaccination under Section 2 of the Vaccination Act, 1898, to decline to grant these certificates of conscientious objection.—Sir MATTHEW WHITE RIDLEY: No, sir —The SPEAKER: I am doubtful whether this question ought to have been allowed to appear on the notice paper at all, for it is clearly of a satirical character

The Mistakes of Dispensers.

Major RASCH asked the Vice-President of the Committee of Council on Education whether the attention of the Privy Council had been drawn to the evidence and verdict given at an Inquest held at Heaton Norris on Jan. 9th 1899, from which it appeared that a mistake by a doctor's unqualified dispenser resulted in the patient's death and whether seeing that notwithstanding that the Pharmacy Act enacted that sellers of poisons must possess a qualification it was not illegal for doctors to employ any class of unqualified persons to dispense medicines, however dangerous or poisonous, the Government would take steps to ensure that medicines containing poisons should only be dispensed by those holding either a medical or pharmaceutical qualification.—Sir JOHN GORST The answer to the first paragraph is yes and the Privy Council have been in communication with the General Medical Council on the subject. The Executive Committee of that body while admitting that occasional accidents may arise from the employment by qualified medical practitioners of careless or incompetent dispensers, consider such cases to be very rare and believe that the best protection is afforded to the public by the responsibility of the practitioner for the acts or defaults of the servants whom he employs. Instances of such mistakes are not confined to dispensers employed by medical practitioners

The Law of Constructive Murder

In answer to a question on this subject, Sir MATTHEW WHITE RIDLEY said: I am of opinion that the law of constructive murder does require amendment, but it is a very difficult subject to deal with, and I cannot hold out any hope that the Government will be able this session to introduce a Bill or otherwise to afford adequate facilities for the treatment of this important question I may add that I understand that the opinion of Her Majesty's Judges on the existing state of the law has been specially invited.

Aldershot Sewage Farm

Mr JEFFREYS asked the Financial Secretary to the War Office whether any and if so, what sale of milk now took place from the camp sewage farm at Aldershot, whether a committee of independent medical men had inspected the farm and the dairy and whether their report would be communicated to the House.—Mr POWELL WILLIAMS: Milk from the camp farm dairy is supplied, if desired to the canteens at Aldershot and also to officers and married non commissioned officers and men The farm was inspected quite recently by Dr Andrewes, who is sanitary officer and pathologist to the Medical School of St. Bartholomew's Hospital and who was selected for the duty at the recommendation of the medical officer of the Local Government Board. His report has not yet been received, but it is understood that he has formed a very favourable opinion of the sanitary state of the dairy and farm. The report will be laid upon the table without unnecessary delay —Mr JOHN DILLON: Can the hon Member say whether Dr Andrewes drank any of the milk himself?—Mr POWELL WILLIAMS: I am not informed as to that, but I may say that Dr Andrewes purchased some of the butter for consumption in his own family

MONDAY MAY 8TH

Venereal Disease at Gibraltar

Mr GEORGE WYNDHAM, in reply to a question upon this subject, said that the report about Gibraltar had been received. It dealt among other matters with venereal disease. In respect of the garrison during the five years ending in 1897 the admissions averaged 290 per 1000 in each year, as against 152 at Malta and 170 in the United Kingdom. The average daily number in hospital was 28 3 per 1000, as against 15 3 at Malta and 15 0 at home The report of the Committee was under consideration

Proposed Factory and Workshop Legislation

Sir MATTHEW WHITE RIDLEY, [illegible] reply to questions, said that for some time he had been fully informed [illegible] the long hours worked in the fruit-preserving industry, and [illegible] that legislation on the subject was desirable. He had a Bill to [illegible] amend certain points in the Factory Acts ready for introduction if opportunity served and the law affecting laundries was one of the matters with which he should like to deal. But he was unable at present to say how much it might be found desirable to include in the Bill.

Early [illegible] Vaccination

Mr CHA[illegible] whether h[illegible] [illegible]nt of the Local Government Board [illegible] nd if so to what effect, from the authorities of Queen Charlotte's Hospital, the St. Pancras Workhouse, and other similar institutions to whom he had made representations that the vaccination of infants within a few days of birth was undesirable and should be discontinued.—Mr T W RUSSELL (for Mr CHAPLIN) replied: The Local Government Board has been in further communication with the authorities of Queen Charlotte's Hospital with the view of giving effect to the views already expressed by the Board. It has not been deemed necessary to make any further communication to the other authorities referred to.

TUESDAY, MAY 9TH.

Experiments on Living Animals

Mr PAULTON asked the Home Secretary (1) whether certificates were issued to persons holding licences under the Cruelty to Animals Act, 1876, allowing them to make experiments on living animals without anæsthetics except during the initial operation (2) whether during later stages of the experiment the holder of such certificate would be at liberty, should he so desire, to keep the animal alive without the further use of anæsthetics for the purpose of conducting observations and dissections, and (3) whether he still adhered without qualification to his former official statement that certificates of exemption from the compulsory use of anæsthetics were only given for such operations as inoculations or hypodermic injections which were of a comparatively painless character —Sir MATTHEW WHITE RIDLEY replied: The nature of the certificates referred to would be more accurately described as follows. Under the terms of Section 3, Sub-section 3, of the Act certificates are granted the effect of which is to exempt the holder from the obligation to kill the animal experimented upon before it recovers from the influence of the anæsthetic when killing the animal would necessarily frustrate the object of the experiment, and provided that the animal is killed as soon as that object is attained. I would add with reference to the second paragraph that the sole use of the certificate is to authorise the keeping alive of the animal after the influence of the anæsthetic has passed off for the purpose of observation and study I should certainly not allow any certificate involving dissections or painful operations without the fresh use of anæsthetics. The statement mentioned in the third paragraph, to which I adhere without qualification had reference to a different class of certificates from those just dealt with—viz. certificates granting total exemption from the compulsory use of anæsthetics.

SALE OF FOOD AND DRUGS BILL.

PROCEEDINGS IN THE GRAND COMMITTEE.

THURSDAY MAY 4TH.

The Grand Committee of the House of Commons on Trade met to-day with Mr JOHN ELLIS in the chair, and resumed the consideration of the Sale of Food and Drugs Bill, beginning with Clause 3 which says: "It shall be unlawful to manufacture, sell, expose for sale or import any margarine which contains more than 10 per cent. of butter fat, and every person who manufactures, sells, exposes for sale or imports any margarine which contains more than that percentage shall be guilty of an offence under the Margarine Act 1887 and any defence which would be a defence under Section 7 of that Act shall be a defence under this section, and the provisions of the former section shall apply accordingly "

Mr KEARLEY moved an amendment to make possession of this margarine an offence. He did so he said, with a special view to cover the case of persons who used this falsified article for making confectionery

Sir JOHN LENG opposed the amendment as an undue interference with trade, and pointed out that people might have this animal fat or margarine not for introducing into food but for purposes of lubrication.

Mr BRYNMOR JONES said he did not think the amendment strengthened the clause in any way for he saw no difference between exposing the article for sale and possessing it.

Mr ASCROFT opposed the amendment because, in his opinion, it would bring within the scope of the clause railway companies who simply carried the article

On a vote being taken the amendment was rejected by 16 to 15 votes.

Mr JEFFREYS moved to insert 6 per cent. in place of 10 per cent. In foreign countries he said the percentage was less than 10 per cent. In Belgium it was 5 and in Denmark 3 per cent. while in Germany all mixtures were prohibited.

Mr R. G WEBSTER objected to any restriction upon mixtures on the ground that restriction meant interference with the trade in margarine.

Mr ASCROFT said he had made a trial of a mixture of butter and margarine and found it an excellent condiment to food. In a matter of this kind they had to consider not merely the interest of agriculture but that of the whole community and he submitted that there should not be this interference with what was a legitimate business.

Mr GEORGE WHITELEY spoke in the same line.

Sir JOHN LENG presented the case of margarine manufacturers in this country He said 600 tons of margarine were manufactured in this country each week and taken at £40 per ton this represented a value of about £1,200 000 per annum. The capital invested in the business amounted to £1 500 000 While the home manufacture was steadily increasing the importation of the foreign article was on the wane, 1 109,000 cwt. having been imported in 1894 and 899,000 cwt. in 1898. The hon member argued that the making of margarine benefited agriculture in many ways. He cited the opinion of Mr Armour of Chicago that it had added £1 per head to the value of cattle both in the United States and in this country and stated that it had led to an increased demand for milk. The 10 per cent. limit of butter fat was, he said, a fatal blow at the home trade. All previous legislation of this kind had been based upon a consideration for health, but no one ventured to say that mixtures of butter and margarine were injurious to health. Not only so but this was the first attempt in modern legislation to pass an enactment whereby one class of manufacturer was compelled to depreciate the quality of his products in order that an improved market might be established for another class of manufacturer

Mr WALTER LONG asked the Committee to stand by the proposed limit of 10 per cent. He believed that there was no greater fallacy than to imagine that the effect of this limit would be to necessitate the production of an inferior article. There was abundant scientific evidence of the highest and most reliable character to show that the very [illegible] quality of margarine could be produced with this limitation of 10 per

cent. of butter fat. He had himself seen samples which were guaranteed after analytical examination of the very highest possible character of margarine which contained less than 10 per cent. of butter fat. He agreed that it was undesirable to interfere with any process of manufacture, but what they had to deal with was indisputable evidence of a large system of fraud in connexion with these so-called mixtures. Margarine was a wholesome article and it was in great demand and so long as it was properly manufactured and honestly sold there could be no question of interference. But fraud went on and it was difficult to detect and this clause was intended to strengthen the present law In the opinion of Professor Thorpe 10 per cent. allowed a reasonable working margin and was a fair superior limit.

Sir CHARLES CAMERON said he regarded this clause not as a compromise but as an intensely vicious and retrograde step. He objected to any limit being put upon a perfectly legitimate and honest business.

Mr P J POWER supported the clause on the ground that it would interfere only with dishonest trade.

Mr KEARLEY taking the same view, said that these mixtures were sold not as margarine but as genuine butter There was, he said a huge and hideous swindle going on in the country and it was the duty of Parliament to put it down He had the opinion of Professor Otto Hehner that from 3 to 5 per cent. of butter in margarine could easily be detected by a skilled analyst and the statement of the largest manufacturer of margarine in Europe that 2 or 3 per cent. of butter fat was all that was taken up in the ordinary process of making margarine

Mr T W RUSSELL, who was Chairman of the Select Committee on the subject of food adulteration defended 10 per cent. as a reasonable compromise.

Mr JOHN BURNS also defended the clause and said that if poor people used margarine it was their poverty and not their will which consented

On a division the amendment was rejected by 34 to 15 votes.

Sir CHARLES CAMERON challenged the whole clause, but it was adopted by the Committee by 27 to five votes.

Clause 9 (provision as to name and address of person selling milk in a public place) and Clause 10 (division of samples taken in course of delivery) were passed subject to certain verbal amendments.

Clause 11 provides that every tin or other receptacle containing condensed, separated, or skimmed milk must bear a label on which the words separated milk" or skimmed milk" as the case may require, are printed in large and legible type; and Mr STRACHEY moved to insert in the clause a proviso to the effect that no colouring matter shall be added to condensed, separated, or skimmed milk. He submitted that in this case the colouring matter was not introduced to please the eye but to defraud the customer and therefore it should be prohibited.

Mr LONG however took the line that colouring must be dealt with comprehensively and not with reference only to selected articles, and on a division the amendment was rejected by 23 to six votes. The penalty provided in the clause was raised from £2 to £10.

On Clause 12, dealing with notice of mixtures, Mr HEYWOOD JOHNSTONE, on behalf of Mr HOBHOUSE, moved to insert a proviso to the effect that where the mixture contains less than 60 per cent. of the article or drug the label shall contain a distinct and legible statement of the quantities so contained of the article or drug and of the other matters or ingredients respectively"

Mr LONG insisted that such a proviso would not be in accord with previous legislation and asked his hon. friend not to press it.

The amendment was by leave withdrawn and the clause agreed to, as was also Clause 13 amending the Act of 1875 with respect to samples.

The Committee then adjourned.

MONDAY MAY 8TH.

The Committee resumed work to-day with Mr JOHN ELLIS again in the chair

Clause 14 in the Bill as introduced read as follows, viz.: Where, under any provision of the Sale of Food and Drugs Act, 1875, a person guilty of an offence is liable to a fine not exceeding £20, he shall be liable for a second offence under the same provision to a fine not exceeding £50 and for any subsequent offence to a fine not exceeding £100."

Mr KEARLEY moved to leave out, to a fine not exceeding £50 and for any subsequent offence to a fine not exceeding £100," and to insert, "to a penalty of not less than £5 and not exceeding £50, and for a third or subsequent offence to a penalty of not less than £20 and not exceeding £100 or in the discretion of the justices hearing the case to imprisonment with or without hard labour for a period not exceeding three calendar months." The hon. Member said that the Select Committee on the Adulteration of Food Products were unanimous in thinking that if this fraud was to be checked there must be some power given to the magistrates to imprison persistent offenders. The evidence taken by the Committee went to show that although the bulk of traders desired to conduct their business in an honourable and straightforward way nevertheless there did exist a section who were habitually dishonest, who profited largely by their dishonesty and who were not properly dealt with by the present system of fines. Not only so but honest traders found it impossible to compete with these others and were tempted in self-defence to adopt their practices. What the legislature ought to seek to do was to get at the regular practitioner in this system of dishonesty and punish him in a way he would feel and he was confident that the best means of securing this was to give magistrates power to imprison. It had been said that what he proposed would strike at the small trader, but he might tell the Committee that when the opinion of the grocers of the town of Bolton was taken on the question of this power to imprison on the third and subsequent convictions for the fraudulent sale of margarine 31 voted for it and only 10 voted against it.

Mr WALTER LONG said that the Government were very much in accord with the hon. Member in regard to this matter and he thought that there was general agreement that it was necessary to introduce into the Bill powers to enable magistrates to inflict imprisonment in the graver cases, the difference between them was rather one of detail and he was hopeful that the hon. Member would not press his amendment but accept the one standing in the name of the Member for Thirsk (Mr Grant Lawson) which proposed to add to the clause in the Bill these words: Where, under any provision of the Sale of Foods and Drugs Acts, a person guilty of an offence is liable to a fine exceeding £50 and the offence, in the opinion of the court, was committed wilfully by the personal act, default, or negligence of the person accused, that person shall be liable (if the court is of opinion that a fine will not meet the circumstances of the case) to imprisonment, with or without hard labour for a period not exceeding three months." It was asserted by those who were better acquainted with the trade than he could pretend to be that the profits made by this fraudulent trading were so great that the offenders could afford from the financial point of view to ignore the penalties now inflicted and that the penalty of fine being of course held to be one involving far less disgrace than the penalty of imprisonment they treated it with contempt and went on offending The hon. Member proposed in his amendment to introduce minimum penalties, but he was assured by the Solicitor-General that all the highest legal authorities were satisfied that to impose minimum penalties was to tie the hands of the court in a manner which defeated the very objects of the legislation. In a weak case if the magistrates were compelled to inflict a minimum penalty they would probably dismiss the case altogether whereas if their hands were free they would convict and inflict a smaller penalty There was this fact to remember also, that as it was proposed to enable the magistrates to impose the penalty of imprisonment for the third offence there was, as it were a future responsibility attached to the first conviction.

Mr ASCROFT suggested that Mr Kearley should accept the compromise offered by the Government.

Mr PHILIPPS on the other hand thought that the hon. Member should persist with his amendment and not only so but strengthen it by making it obligatory upon the magistrates to imprison for the third offence.

Mr MACLEAN condemned the amendment as a feeble and futile attempt at legislation and said he should not be sorry if when the Bill went to the House of Lords it were thrown out altogether

Mr DUCKWORTH said that if the amendment became law it would be easy for assistants with a grudge or complaint against their master so to act as to bring about his imprisonment. He considered that this amendment and others like it were designed to stop the sale of margarine altogether and he protested against them as an undue and unjustifiable interference with legitimate trade.

The SOLICITOR GENERAL (Sir Robert Finlay) recommended the Committee to accept the compromise offered by the Government.

Sir JOHN LENG insisted that this class of legislation was coercion and a violation of the principles of liberty and free trade

On a vote being taken Mr Kearley's amendment was rejected by 27 to eight votes.

Mr ASCROFT then moved an amendment the object of which was to give defendants the right of trial by jury

The SOLICITOR-GENERAL said that this was contrary to the criminal law which only gave trial by jury where the punishment exceeded three months imprisonment.

Mr ASCROFT said that there was good authority for describing the law as an ass and he thought that it was one in this connexion and he saw no good reason why it should not be altered.

Mr MACLEAN said that they were creating a new offence and if the unfortunate trader was not allowed trial by jury he might as well be living under the rule of the Great Mogul.

Mr COHEN objected to the criminal law being altered to meet a single case

The SOLICITOR-GENERAL said that this was not a case of applying a provision to a new offence, but to all the offences under the Act of 1875.

The amendment was rejected by 28 to nine votes.

Mr LOPES then moved the insertion of the words standing in the name of Mr Grant Lawson and quoted by Mr Walter Long

Mr GEORGE LAMBERT moved an amendment to them extending the discretion of the magistrates to imprison to the second conviction, but he did not press it to a division.

On the motion of Mr TOMLINSON it was agreed to strike out the word "wilfully" which was considered unnecessary in view of what followed

Sir CHARLES CAMERON moved to leave out 'default or negligence" and to put in the place of those words "or with the connivance."

The SOLICITOR-GENERAL opposed the change.

Mr KEARLEY said that the clause as it stood would protect all straightforward men and if it were altered in the manner proposed, swindlers would escape and the whole work of that Committee would go for nothing

The amendment was rejected by 25 to six votes and the words proposed by Mr Lopes with the word wilfully" omitted, were agreed to by 21 to six votes.

Captain DONELAN moved to add Any person convicted of a second or any subsequent offence against the Act shall be required to publish at his own expense a notice of his conviction in the public journals of the locality in which his place of business is situated."

Mr WALTER LONG objected to the amendment, saying that it savoured more of persecution than prosecution.

After some debate it was rejected by 22 to 12 votes.

Clauses 15 and 16 having been agreed to the Committee adjourned.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number*

ARDAGH, V L. M.D Dubl., B.S has been appointed Medical Officer for the Stogumber Sanitary District of the Williton Union.

BUTTERY G B L.R.C.P Edin., L.F P.S. Glasg., has been appointed Medical Officer of Health by the Oldbury Urban District Council

CARROLL, M. J L.R.C.P L.R.C S Irel., has been appointed Medical Officer for the Dundrum Dispensary District.

CHADBORN C N M.R.C S., L.R.C.P has been appointed Ho Surgeon to the Swansea Hospital.

DERAVIN B A., M.B., B.S. Melb., has been appointed Clinical Assistant to the Chelsea Hospital for Women, Fulham road, S W

EDWARDS J HAMMERTON M.A., M.D Cantab. M.R.C.S., L.R.C P has been appointed Assistant Physician to the Bedford County Hospital.

ELLIOTT, F. P., M.B., C.M., has been appointed Medical Officer to the Walthamstow Dispensary.

ERRAUT, HAROLD J., L.R.C.P. Lond., M.R.C.S., has been appointed Senior House Surgeon to the Westminster Hospital.

GORDON, T. E., M.B., B.Ch. Dubl., F.R.C.S. Irel., has been appointed Medical Attendant to the Bank of Ireland, vice H. Scott, resigned.

HAYWARD, A. E., M.R.C.S., has been appointed Medical Officer for the Teignmouth Sanitary District of the Newton Abbot Union.

HUDSON, F. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Workhouse and the West Sanitary District of the Buntingford Union.

KENNEDY, W. G., L.R.C.P. Irel., L.R.C.S., has been appointed Medical Officer for the Fourth Sanitary District of the Salford Union.

KEVIN, BYRNE P., M.D., B.S., B.A. Lond., has been appointed Medical Registrar to the London Temperance Hospital, Hampstead-road, N.W.

LOUD, FRANK, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fifth Sanitary District of the Lewes Union.

MATHIAS, RICHARD, M.A., M.B., B.Ch. Cantab., L.R.C.P., M.R.C.S., has been appointed Medical Officer for the Pentyrch District by the Cardiff Board of Guardians.

MUIR, J. C., M.B. Camb., L.R.C.S. Lond., M.R.C.S., has been appointed Junior Assistant Medical Officer for the Crumpsall Workhouse, Township of Manchester.

PARRY, EDWARD JAMES, M.R.C.S., L.R.C.P., L.S.A., has been appointed House Surgeon to the Victoria Hospital for Children, Chelsea, S.W.

RICE, M. W., M.D. Edin., M.R.C.S., has been appointed Medical Officer for the Gedney Hill Sanitary District of the Holbeach Union.

ROBINSON, THOMAS, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for Leicestershire.

SOPER, R. W., M.R.C.S., has been re-appointed Medical Officer by the Dartmouth and Totnes Port Sanitary Authority.

STEPHENS, L., L.R.C.P. Edin., M.R.C.S., has been re-appointed Medical Officer of Health by the Ilminster Urban District Council.

STEWART, CHARLES HOWARD, L.R.C.P. Lond., M.R.C.S., L.S.A., has been appointed Medical Officer for the Sixth District (Witheridge) by the Southmolton (Devon) Board of Guardians, vice E. S. Pollock, resigned.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN, Birmingham.—Ophthalmic Surgeon.

BOROUGH ASYLUM, Portsmouth.—Junior Assistant Medical Officer. Salary £80, rising £5 yearly to £100, with board, lodging, and washing.

BOROUGH HOSPITAL, Birkenhead.—Senior House Surgeon. Salary £100 a year, with board and washing (no wine, spirits, or beer). Also Visiting House Surgeon, to attend the sick poor in their own homes. Salary £75 a year, with board, lodging, and washing (no wine, spirits, or beer). Certain fees also obtainable.

BRADFORD CHILDREN'S HOSPITAL.—House Surgeon. Salary £70, with board, residence, and washing.

BRISTOL GENERAL HOSPITAL.—House Surgeon for three years conditionally. Salary £120 per annum, with board, residence, &c., in the ... Salary £60, with board, ... Salary £130 per ... Salary ... and attendance ... guineas a week. ... Surgeon and ... Salary, House ... Surgeon, £50, with ... Dumfries.—House ... washing. Also ... provided.

NORTH WEST LONDON HOSPITAL, Kentish Town-road, N.W.—Dental Surgeon. Also Assistant Resident Medical Officer for six months. Salary at the rate of £30 per annum.

ROTHERHAM HOSPITAL.—Assistant House Surgeon. Salary £60 per annum, with rooms, commons and washing.

ROYAL BERKS HOSPITAL, Reading.—Assistant Surgeon.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Hunterian Professors, the Erasmus Wilson Lecturer and the Arris and Gale Lecturer for the ensuing year. Also election to the Court of Examiners.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London.—Resident Medical Officer for six months. Salary at the rate of £[illegible] per annum, with furnished apartments, board, and washing.

ROYAL MINERAL WATER HOSPITAL, Bath.—Resident Medical Officer, unmarried. Salary £100 per annum, with board and apartments in the hospital.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, Ventnor, Isle of Wight.—Assistant Resident Medical Officer, unmarried. Salary £[illegible] per annum, with board and lodging in the hospital. Applications to the Board of Management, London Office, 34, Craven-street, Charing Cross.

ROYAL ORTHOPÆDIC AND SPINAL HOSPITAL, Birmingham.—Honorary Surgeon.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, West Strand, W.C.—Clinical Assistants for six months.

ST. PETER'S HOSPITAL FOR STONE, &c., Henrietta-street, Covent Garden, London.—House Surgeon for six months. Salary at the rate of £100 a year, with board, lodging, and washing.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY, 153, High-street, Stoke Newington, N.—Junior Resident Medical Officer. Salary £100 per annum, with board and residence.

STOCKPORT INFIRMARY.—Junior Assistant House Surgeon. Salary £[illegible] per mensem, with board, washing, and residence.

TOWNSHIP OF TOXTETH PARK.—Senior Assistant Medical Officer for the Workhouse and Infirmary. Salary £125 per annum, with board, washing, and apartments. Subject to statutory [illegible]. Applications to the Clerk to the Guardians, 15, High Park-street, Liverpool.

UNIVERSITY COLLEGE, London.—Jodrell Professorship of Zoology.

VICTORIA UNIVERSITY, THE YORKSHIRE COLLEGE, Leeds.—Demonstrator in Pathology. Salary £120.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £100 per annum, rising £10 a year to £150, with board, &c.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—House Governor and Secretary, unmarried, or widower without [illegible]. Salary £170 a year, with board, washing, and residence in the institution.

Births, Marriages, and Deaths.

BIRTHS.

BAMFORD.—On May 2nd, at Trent Vale, the wife of Thomas [illegible], L.R.C.P. Lond., M.R.C.S., of Enville House, [illegible], of a daughter.

BLOXAM.—On May 7th, at Newbridge-road, Bath, the wife of [illegible] Bloxam, M.R.C.S., L.R.C.P., of a daughter.

BOWER.—On May 10th, at Langton Lodge, Hendon, the wife of [illegible] Bower, M.B., of a son.

BRODIE.—On May 3rd, at Lindfield, Uxbridge-road, Surbiton, the wife of T. G. Brodie, M.D., of a son.

FIELD.—On May 7th, at Friern Lodge, Lordship-lane, D[illegible], the wife of F. A. Field, L.R.C.P. Lond., M.R.C.S., of a son.

ORBELL RAY.—On May 2nd, at Southery, Downham Market, the wife of Walter J. Orbell Ray, M.R.C.S., L.R.C.P., of a [illegible].

PENDRED.—On May 5th, at Lebanon-gardens, Wandsworth, the wife of Berthon Fleming Pendred, M.R.C.S., L.R.C.P., of a [illegible].

ROUTH.—On May 7th, at St. Saviour's, Bridgwater, Somerset, the wife of Henry F. Routh, M.R.C.S., L.R.C.P., of a son.

SCHOLEFIELD.—On May 7th, at Eastcombe-villas, Blackheath, the wife of Dr. R. E. Scholefield, of a son.

WHITAKER.—On May 8th, at Lindrick House, Finsbury, the wife of George H. Whitaker, M.R.C.S., of a daughter.

MARRIAGES.

COX—DE VOS.—On May 1st, Alfred Harold Lieutenant Cox, H.M.S. *Victory*, to Evelyn C. de Vos, second daughter of [illegible] Vos, of Ceylon.

JULL—STEWART.—On Nov. 12th, 1898, at Guildford, Western [illegible], Martin Edward Jull, Under-Secretary for Public Works, son of the late Thomas Jull, of Horsham, Sussex, to [illegible] Stewart, M.B., C.M., elder daughter of the Rev. [illegible], Lisbon.

WILLOCK—KILDAHL.—On May [illegible]th, at St. Andrew's, [illegible] Hulse Willock, M.R.C.S., L.R.C.P., second son of [illegible] Hulse Willock, 2nd Bengal Cavalry, to Ella [illegible], daughter of the late William Sobieski Kildahl, of [illegible].

WILLS—TURES.—On May 2nd, at Emmanuel Church, [illegible], Rev. Robert Thompson, vicar of Longcott, assisted by [illegible] O'Shea and the Rev. W. J. Leigh-Phillips, [illegible] M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., to Isabella, youngest daughter of Charles [illegible], [illegible], Plymouth.

DEATHS.

EUSTACE.—On May [illegible]th, at his residence, Elmhurst, [illegible], John Eustace, M.D., J.P., aged 73 years.

JACKSON.—On May 4th, at Louth, Lincolnshire, [illegible], M.R.C.S. and L.S.A.

[illegible].—On May 5th, at Elmfield, Sydenham, [illegible] Jepson, M.D., aged 80 years.

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS.

DAY (15th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) St. George's (2 P.M.), Ophthalmic 1 15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1 30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

DAY (16th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (P.M. and 6 P.M.), Royal Ear (3 P.M.).

NESDAY (17th).—St. Bartholomew's (1.30 P.M.), University College, (P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (P.M.), St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) Cancer (2 P.M.).

RSDAY (18th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (1.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.) North-West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological 2.30 P.M.) Metropolitan (2.30 P.M.), London Throat (2 P.M.) St. Mark's (2 P.M.).

DAY (19th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.), St. Mary's (2 P.M. Ophthalmic 10 A.M.), Cancer (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

URDAY (20th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) St. Mary's (10 P.M.), London Throat (2 P.M.).

the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic (A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Royal London Ophthalmic Hospitals operations are performed daily

SOCIETIES

DAY (15th).—MEDICAL SOCIETY OF LONDON—8.30 P.M. Annual Conversazione. Oration:—Mr A. Doran: Shakespeare and the Medical Society

SDAY (16th).—PATHOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8 30 P.M. Papers —Dr H. R. Durham: Infections from Unsound Meat (illustrated by lantern slides).—Dr Ritchie: The Relation of Chemical Composition to Germicidal Action. Card Specimens —Dr A. E. Garrod Fibrosis of Lung.—Dr W. S. Lazarus-Barlow: Syphilitic Stricture of Bile Duct.—Dr Rolleston: (1) Columnar celled Carcinoma of the Tail of the Pancreas (2) Tumour containing Multinuclear Giant Cells from the Skin of the Neck.—Mr T Lister (1) Tuberculous Gastric Ulcer; (2) Ulcerative Colitis (3) Ulcer of Duodenum in Melæna Neonatorum. 9.30 P.M Annual General Meeting for the Election of Officers for the ensuing Session.—Report of the Committee on Pseudo-tuberculosis.—Reports of the Morbid Growths Committee upon Specimens referred to it during the last six months—viz Mr Barker's, Mr S. Boyd's, and Dr C. D Green's Specimens.

CHELSEA CLINICAL SOCIETY (Parish Hall, Pavilion-road, Sloane-square, S.W.)—8.30 P.M. Annual Meeting. To receive the Reports of the Council Secretary and Treasurer To Elect Officers for the next Session.

ROYAL STATISTICAL SOCIETY (Royal United Service Institution Whitehall, S W.)—6 P.M Paper:—Mr T. H. Hayward: Life Tables, their Construction and Practical Uses.

ONESDAY (17th).—ROYAL MICROSCOPICAL SOCIETY (20 Hanover-square, W.).—7 30 P.M. Exhibition of Pond Life.

NORTH WEST LONDON CLINICAL SOCIETY (North West London Hospital).—8.30 P.M. Clinical Meeting

URSDAY (18th).—HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Fitzhorne-street, Edgware-road).—8.30 P.M. Dr Caley: Considerations as to the Etiology and Significance of Dilated Heart.

DAY (19th).—EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.)—8.30 P.M. Paper:—Prof. R. H. Saltet (Amsterdam): A Study of Enteric Fever in the Netherlands.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

SDAY (15th).—CENTRAL LONDON THROAT NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr Lennox Browne: Difficulty of Swallowing.

EST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr Cheatle: The Management of Certain Minor Operations.

SDAY (16th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Ferrier: Disseminated Sclerosis.

ONESDAY (17th).—ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr Eddowes Psoriasis (Post-graduate Course).

OSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Mr Godlee: Some Cases of Actinomycosis.

URSDAY (18th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn road, W.C.)—5 P.M. Dr D Grant: Examination of the Ear

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL (Hyde-park-corner S.W.)—3 P.M. Dr W H. Dickinson: Fragments of Pathology and Therapeutics. (Baillie Lecture).

CHARING-CROSS HOSPITAL.—4 P.M. Dr Abercrombie: Demonstration of Medical Cases. (Post-Graduate Course)

LONDON TEMPERANCE HOSPITAL.—2 P.M Dr S Fenwick Clinical and Pathological Demonstration to Senior Students.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr Cheatle: The Management of Certain Minor Operations.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER'S NOTICES

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WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices

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The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND

MEDICAL EVIDENCE AT CORONERS INQUESTS"

To the Editors of THE LANCET

SIRS—In your article on the above subject in THE LANCET of April 22nd you point out that the utility of inquests is frequently limited by the absence of medical evidence and that the remedy for this is that the coroner should always be a medical man I feel sure that you do not hold that the coroner should supplant the medical witness at the inquest, but I fear that this is what frequently happens when the coroner is a medical man at any rate, in my district medical evidence is rarely required at inquests as the coroner supplies it himself being a member of the medical profession. The preliminary inquiry in cases of sudden death is made by a village constable sometimes a raw youth who has been in the police force only a few months, and on his report the coroner decides whether he will hold an inquest or not. The following are a few examples of cases which have occurred lately —1 A man who had been in good health was suddenly taken ill the friends sent for a medical man who on arrival found the patient dead An inquest was held there was no medical evidence and no communication with the medical attendant. 2. A child who had been attended and supplied with medicine by a schoolmaster suddenly died Investigation was made by the parish constable there was no inquest. 3. A child was taken ill with diarrhœa the father called on a medical man and obtained a bottle of medicine he did not request the medical man to visit his child the child died. Investigation was made by the parish constable An inquest was held there was no medical evidence and no communication with the medical man. 4 A man was found dead in bed he had not been attended or seen by a medical man An inquest was held. There was no medical evidence 5. A boy fell into the water and was immersed for 10 minutes. No medical man was sent for the boy died. An inquest was held. There was no medical evidence. 6 A man while crossing the railway was knocked down by a train and killed. No medical man was summoned. An inquest was held. There was no medical evidence The remedy I suggest is (1) that in every case of sudden death a medical man should inspect the body and draw up a report of the circumstances attending the death, which report should be forwarded to the coroner and (2) at every inquest the medical man who has made the investigation should be present to give his evidence.

I am, Sirs, yours faithfully

April 30th, 1899 REFORM

THE NEW EYESIGHT SPECIALIST

IN the Annus Medicus of 1898 (THE LANCET, Dec. 31st, 1898, page 1779) we said that the issuing of diplomas by the Worshipful Company of Spectacle Makers was not likely to lead to friction between the surgeon and the optician. The ophthalmic surgeon in our view would be content to know that some of the patients who would have applied to him have gone to the optician, for the optician with larger information than he had previously would recognise the numerous cases requiring a different kind of knowledge from that possessed by him and would if wise, transfer them to the ophthalmic surgeon. Such a position would, in our opinion, result in no loss to either surgeon or optician and in benefit to the patients. The four months which have elapsed since writing to this effect have brought us no evidence directly that we were premature in expressing our views.

But the list of names appended to the memorial to be presented by the Corporate and Medical Reform Association to the General Medical Council—which memorial objects strongly to these diplomas for opticians—would seem to indicate that ophthalmic surgeons take a different view to the one which we anticipated for them. That list includes the names of Mr Brailey ophthalmic surgeon to Guy's Hospital Mr Critchett and Mr Juler ophthalmic surgeons to St. Mary's Hospital Mr Work Dodd, ophthalmic surgeon to the Royal Free Hospital Mr Frost, ophthalmic surgeon to St. George's Hospital Mr Hartridge ophthalmic surgeon to the Westminster Hospital Mr Jessop, ophthalmic surgeon to St. Bartholomew's Hospital Mr McHardy, ophthalmic surgeon to King's College Hospital Mr Nettleship, ophthalmic surgeon to St Thomas's Hospital Dr Argyll Robertson consulting ophthalmic surgeon to the Edinburgh Royal Infirmary Mr Sydney Stephenson ophthalmic surgeon to the Evelina Hospital and Dr Bell Taylor surgeon to the Nottingham and Midland Eye Infirmary It is clear that this representative body of ophthalmic surgeons consider that their professional position is encroached upon by the education of opticians up to a certain standard, and their opinion is one which we do not desire to disregard.

As a matter of fact the subject has been approached by the Corporate and Medical Reform Association and by ourselves from different points of view and we think that ours is the more practical one. So far as the general practitioner is concerned we do not believe that he has suffered or will suffer material harm. The question whether certain work will now be done by laymen openly which has for a time of indefinite length been done by those laymen secretly and upon age is one that we did not enter upon for it seemed in its nature. Theoretically all pathological to the eye should be submitted to and answered inasmuch as ophthalmology is a province ly we believed that the educated optician for eye cases, his sound modicum of knowledge enabling him to see what case falls within his sphere and what should be sent on to the surgeon. We are in complete agreement with all who consider that it is an act of impudent usurpation for the possessor of the diploma of the Worshipful Company of Spectacle Makers to arrogate to himself the position of the ophthalmic surgeon or the medical man. The Company had nothing of the sort indicated by the following paragraph and advertisement in view, we may be certain when they decided to institute an examination for diplomas:—

I *The Paragraph.*

LOCAL SUCCESS.—Mr Hayden B.O.A., F.S.M.C. (Lond.) ophthalmic optician and eyesight specialist, of 28, Market-row has just successfully passed an examination under Mr G Lindsay Johnson, M.A., B.Sc. F.R.C.S., Professor Silvanus Thompson, D.Sc. F.R.S., and Mr G Paxton, held by the Worshipful Company of Spectacle Makers London and in consequence has been granted a diploma of Fellowship of the Company, and has been admitted a Freeman of the Company and also a Freeman of the City of London. This is a distinction, we believe, no one else in Yarmouth possesses, and was the second gentleman to be presented with the freedom of the city after the Sirdar, Lord Kitchener of Aspell and Khartoum.

II *The Advertisement.*

MR HAYDEN,

B.O.A. F.S.M.C (Lond.),

OPHTHALMIC OPTICIAN,

AND

EYESIGHT SPECIALIST,

QUALIFIED OPTICIAN BY EXAMINATION

CONSULTATIONS AND SIGHT TESTING FREE DAILY

The only Registered and Certificated Optician in Yarmouth

Mr Hayden attends personally from 9 till 7 daily Thursdays 9 till 2, at his Consulting and Sight-testing Rooms,

28, MARKET ROW, YARMOUTH

Mr Hayden's methods for examining the Eyes and testing the Sight are on the most modern and up-to-date principles, the same as practised by the leading

LONDON OPHTHALMIC SURGEONS.

ARTIFICIAL HUMAN EYES CAREFULLY MATCHED AND FITTED.

☞ Why do you consult a Quack Optician? You would not consult a quack doctor or allow a Pedlar to give you Medicine

This sort of thing was not contemplated either by the Worshipful Company of Spectacle Makers or by ourselves. We draw attention to Mr Hayden's comparison of his methods with those of the "Leading London Ophthalmic Surgeons," and we recommend the Company to provide themselves—if they have not already done so—with the legal machinery for taking away their diplomas from persons who make an improper use of them. It is quite wrong that advertisements in such terms as the one we have just quoted should appear. Their phraseology is an insult to the medical profession, and does injustice to other opticians Opticians who do not possess diplomas are *not* quack opticians, and it is advisable that the Worshipful Company of Spectacle Makers should repudiate any belief in such a view

"POISON BOTTLES"

MR E. MILTON SMALL of New Brompton, Kent, calls our attention to an inquest held at Maidstone on Tuesday, April 18th, on the body of Henrietta Amelia Stanton, aged 47 years, whose sister gave her a dose of hartshorn in mistake for medicine, the two bottles standing together on a table by the bed, and states that he has applied for a provisional patent suggesting that the lip of poison bottles should be brought down and joined to the side or shoulder so as to form the letter P and as an additional precaution "P for Poison," he says "might be moulded on the shoulders of the bottles If P for Poison became household words the very feel of the handle would send a thrill into the heart of a person attending on a patient and waken into intelligence the most over-wrought. The construction of the bottle would make it distinct in the dark and would therefore be better than the use of blue glass or red labels. The suggestion is worthy of attention, but experience proves that something more than a peculiarity in the shape of the bottle is necessary if accidents are to be avoided.

"SUPERFLUOUS HAIR."

To the Editors of THE LANCET

SIRS—In THE LANCET of April 29th "M.D." asks for advice as to the treatment of a young lady who is growing a moustache and desires suggestions to remedy this great annoyance She had better resign herself to the masculine method of removing undesired hair and learn to shave. As her hair is dark she will need to shave every day and surely there can be no reproach or violation of delicacy in such an expedient. Electrolysis in cosmetic surgery" is of infinite use in the removal of hairy moles and other blemishes, such as naevus and

it has fallen to my lot to treat a very large number of such cases. But where there is a growth of hair fine and close on normal skin electrolysis of every hair root, though perfectly efficient, leaves a white atrophied integument—in fact, a cicatrix The electrolytic operation if performed with an ordinary medical battery is an extremely painful one and has to be repeated many times. If done with two or three cells of large E.M.F there is much less pain and accumulators answer best but the method is entirely unsuitable in any such condition as that described by 'M.D" Of the barium depilatory pastes I have *no* experience and do not intend to try them till I have had some satisfactory evidence of their effect brought to my notice by somebody else. I am, Sirs yours faithfully,

Slough May 4th 1899 R. SHALDERS MILLER, F.R.C.S. Eng.

To the Editors of THE LANCET

SIRS—In cases such as those described by "M.D" and by Mr Balmanno Squire in THE LANCET of April 29th and May 6th unsuited for treatment by the electrolysis needle I have found a very simple expedient give very good results. I order a lotion of peroxide of hydrogen to be applied to the part every three or four nights and the hairs well soaked in it The hairs are thus rendered colourless and practically invisible The treatment has to be continued at intervals but it is not distasteful to the patient in the way that regular shaving is. I am, Sirs, yours faithfully

ETHEL M. N WILLIAMS M.D Lond

Newcastle-on Tyne May 6th, 1899

To the Editors of THE LANCET

SIRS—In answer to M.D s" letter in THE LANCET of April 29th I would suggest to him to employ electrolysis if the hairs be few in number but should the growth be abundant to *leave it alone*

Women as a rule do not complain much about the pain caused by the needle, inasmuch as not many hairs are removed at one sitting But it must be borne in mind that the seat of puncture is rather unsightly for some time afterwards. Perhaps M.D" would be wise to send his patient to an experienced dermatologist in order to be advised whether electrolysis should be undertaken. These cases very often from the extreme sensitiveness which the growth excites in the mind of those unfortunately affected, banished as it were from society and probably pooh poohed by the medical man, drift eventually into the hands of hairdressers who charge exorbitant fees and frequently disfigure the face considerably through unskilfulness in handling the needle. I am, Sirs, yours faithfully

May 1st, 1899. P J F K.

A BELGIAN PRIEST PUNISHED FOR QUACKERY

THE Court of Sens, after hearing charges against the Abbé Crub director of the Orthopædic Institute, for the illegal practice of medicine found him guilty and sentenced him to a fine of 500 francs in addition to the costs of the trial. At the same time his assistant was found guilty of wounding by negligence" and was sentenced to imprisonment for two days and to pay a fine of 100 francs. The trial lasted three days.

HOMES FOR INEBRIATES

To the Editors of THE LANCET

SIRS,—I should be much obliged if any of your readers could inform me of a suitable home for a case of inebriety The patient is a man of 40 and could pay about £1 per week

I am, Sirs, yours faithfully

May 9th, 1899 E. J M

VETERINARY QUACKERY

THE Veterinary Surgeons Society of Verviers is on the warpath against quackery It has decided to send out a circular to the police and to persons believed to act as veterinary quacks offering a reward of 50 francs to anyone who will give information leading to the conviction of a quack for the illegal practice of veterinary medicine.

WANTED A HOME.

To the Editors of THE LANCET

SIRS—Will you or some reader kindly inform me where it is possible to place a most deserving male patient (a member of Stanley's rear guard) suffering from chronic phthisis? He is at present seriously ill, in lodgings, with poor attendance. He informs me that he is unable to gain admission into any of the London hospitals or other charitable institution He is able to pay a small sum weekly

I am, Sirs, yours faithfully

REGINALD NITCH-SMITH.

47 Bessborough gardens, South Belgravia, S.W., May 2nd 1899

IS IT QUACKERY?

To the Editors of THE LANCET

SIRS,—Is it making too great demands on your kind services to the profession to ask if you know anything of a Swedish gentleman whose card bears the inscription —"Mr T P von Braun Morpeth man'ons Morpeth terrace, S.W" He professes to be an expert in Swedish movements A patient of mine while in town, was recommended to him by a friend who had undergone treatment by the expert. My patient paid him a visit was examined physically—the gentleman in question prodding" his abdomen all over but omitting any further method of examination—was informed that his liver was enlarged and congested," and was recommended to undergo a course of "cure" lasting six weeks and costing 40 guineas. My patient thought it well to ascertain first of all whether he really stood in need of treatment, and on examining him on his return home I found his liver occupying strictly the normal limits and showing no signs of either active or passive congestion." The whole transaction appeared to me so interesting that I should be glad to ascertain through you to what extent the gentleman in question and his methods are known to the profession I am, Sirs yours faithfully,

May 5th 1899 ENQUIRER.

'THE WEIR MITCHELL METHOD'

MISS S B HAMMON Warrington Lodge, Warwick road, Maida Vale W, writes: In answer to your correspondent's query in THE LANCET of May 6th I beg to say I receive patients for the Weir-Mitchell treatment and my fees for such are from seven to 10 guineas per week My rooms are large and airy and I have a good staff of nurses.

ENTERIC FEVER IN BISHOP AUCKLAND"

IN an annotation under the above heading which appeared in our issue of May 6th we said, line 13: 'This view did not meet with the approval of the Local Government Board' Dr Hill writes to us to point out that there was no difference of opinion between himself and the Local Government Board. The authority from whom he differed was the local board" or urban sanitary authority"

Dr Carey—The whole subject has been dealt with in a small pamphlet entitled Difficulties under the Infectious Disease (Notification) Act reprinted from THE LANCET and published at this office price 1s The pamphlet shows that the Local Government Board desire that in every way the medical officer of health and the practitioner should work in harmony

Justitia.—We are on the side of the examiners. A man's tenure of his subject ought not to be so frail that it snaps at a little extra strain We do not think the piecemeal system of examination is always the best.

R. V—The Students Number of THE LANCET gives complete information with regard to the various scholarships offered. The Dean of the Medical School selected will answer any questions.

Ignoramus—The institution is a quack affair which has been exposed over and over again. We thought it had perished and should be obliged for any evidence as to its present activity

Mr J Grigor — 'The Senile Heart: its Symptoms, Sequelæ, and Treatment, by Dr G W Balfour was published by Messrs. A. and C Black London, in 1894

A C C.—We know of no such place The matter is one upon which the family medical man should be consulted

P C S—We are willing to examine one of the lamps referred to

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 11th 1899.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
May 5	30·39	N.E.	..	98	57	38	42	45	Fine
6	30·40	N.E.	...	103	61	39	42	45	Cloudy
7	30·37	N.E.	..	105	64	41	48	50	Fine
8	30·08	N.E.	..	111	64	45	49	55	Cloudy
9	29·83	N	0·02	68	58	44	48	50	Overcast
10	29·86	N	..	84	60	46	47	52	Cloudy
11	29·90	N	...	84	60	45	48	50	Overcast

During the week marked copies of the following newspapers have been received *North British Daily Mail Western Mail, Hull Daily News Westmeath Examiner, Newry Reporter Cheltenham Mercury Macclesfield Courier Bridlington Gazette, Brighouse News Beverley Independent, Middlesex Advertiser Scotsman, Citizen South Durham Mercury Architect, Coventry Daily Telegraph Times of India, Pioneer Mail Nuneaton Observer Builder Hinckley Observer Warwick Times, Liverpool Daily Post, Bath Argus Peterborough Evening News, Peterhead Sentinel, Jarrow Express Blackpool News Yorkshire Post, Literary Digest Bristol Mercury Brighton Gazette, Australian Trading World Undertakers Review and Allied Trades Gazette Sidmouth Observer Eastbourne Gazette Dunstable Borough Gazette Clifton Chronicle, Dean Forest Gazette, Bodmin Leinster Reporter Oswestry Advertiser Local Government Chronicle, Reading Mercury City Press Mining Journal Weekly Free Press and Aberdeen Herald Local Government Journal, Surrey Advertiser Hertfordshire Mercury Bath Herald, Fife News Auckland Chronicle, King's County Chronicle, Bedworth Guardian, Buckingham Express, Sunderland Herald Christchurch Times Caithness Courier Montrose Review Leeds Mercury &c. &c.**

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An Address

ON A SURVEY OF THE CLIMATIC HEALTH RESORTS OF THE UNITED KINGDOM COMPARED WITH THOSE OF THE CONTINENT.

Delivered at a Meeting of the British Balneological and Climatological Society on April 27th, 1899,

BY SIR HERMANN WEBER, M D BONN, F R C P LOND

GENTLEMEN,—As you have done me the honour to ask me to give an address at this annual meeting of the British Balneological Society, I have selected a subject which I hope will meet with your approval and which is not of such a deep nature as to be likely to disturb the social character of the evening I will invite you to follow me in a cursory survey of English climatic health resorts, and I will venture on some comparison between these resorts and continental ones and on some remarks regarding them I shall confine myself to climatic health resorts, and shall not touch upon mineral waters Before I begin I beg leave to direct your further attention with regard to English resorts to the excellent work on "The Climates and Baths of Great Britain"[1] which is the unbiased report of the committee of the Royal Medical and Chirurgical Society Although I was a member of this committee I am permitted to speak with especial praise of this book since I have not made any contribution to it It would be out of place, even if time would allow of it, to enter into the physiological and therapeutic characters of the different classes of health resorts before a society of medical men who are specially conversant with health resorts. I will discuss the subject under two heads (1) marine and (2) inland climatic health resorts

MARINE RESORTS

In commencing with marine resorts I may say at once that there is no country in or out of Europe which can compete with Great Britain during summer and autumn, and that even during winter several English sea-coast places offer—at all events to some constitutions—advantages over continental resorts Great is the number and variety of localities on the different coasts of Great Britain and Ireland, but owing to the peculiar position of these islands the main features are shared by all of them and give them a distinctive character when compared with the seaside climates of the continent Mild winters and cool summers and comparative absence of extremes are the prominent peculiarities This is well illustrated by A Buchan[2] in his instructive book on meteorology "If no more heat were received than is due to the position on the globe in respect to latitude the mean winter temperature of Shetland would be only 3° F and that of London 17° But chiefly owing to the heat given out by the Gulf Stream during winter and carried to these places by the winds their winter temperatures are respectively 39° and 38°, Shetland being benefited 36° and London 21° from their proximity to the warm waters of the Atlantic" The number of rainy days is great, the air is rather humid and being rich in water vapour is less transcalent and translucent than in drier regions, such as the High Alps and the Riviera, but the chill at sunset is less great than in the latter region and the danger of catching cold at that period of the day is diminished The difference in the temperature between night and day is comparatively slight, as the humid atmosphere diminishes the radiation by night To the large amount of vapour we owe the dulness of our atmosphere and the comparatively small amount of sunlight and sun heat Another consequence of the nearness of the sea is a certain degree of windiness There is a great difference in the climates of the east, the south west, and the west coasts Taking the average of years the latter are in winter several degrees warmer than the former, while in summer they are either of equal temperature or even somewhat cooler Buchan shows this graphically by the isothermal lines; those of January run in Great Britain not horizontally from west to east, but turn down from the horizontal direction at almost right angles The summer isotherms, on the other hand, run almost parallel to the lines of latitude and even rise slightly towards the east, showing the latter to be somewhat warmer than the west "Speaking roughly, we may designate the west coast as warm and moist, the east as dry and cold, the western part of the south coast as far as Sidmouth as moist and especially warm, the line from Bournemouth to Hastings including the Isle of Wight as fairly dry and warm, the south eastern part with Folkestone and Dover as approaching the characters of the east coast." There are, however, great differences, not only in the climates of the different coasts but also in those of localities situated close to one another Thus, for instance, it is well known that the climate on the Undercliff in the Isle of Wight is very different from that of Sandown, and Dr Ord justly says that "almost every possible variety of climate is comprehended in the Isle of Wight" Dr Howship Dickinson in his description of Cornwall in the same work points out the difference between St Ives on the north coast of the tongue of Cornwall and Penzance on the south, only a few miles distant from one another, and the same may be said of the whole lengths of coast on north and south of this narrow strip of land

We may roughly divide the seaside places of Great Britain into (*a*) summer and (*b*) winter resorts, but we must add that many of the English winter resorts can with great advantage be used by some classes of delicate persons during the hotter part of the year, and that some summer resorts often do good service in winter

Summer resorts—Of these I have a long list before me, of places with which all of us are more or less intimately acquainted Going from north to south we have Nairn, St Andrews, Portobello, North Berwick, Redcar, Saltburn, Whitby, Scarborough, Filey, Bridlington, Hunstanton, Cromer, Yarmouth, Lowestoft, Aldeburgh, Felixstowe, Walton on the Naze, Westgate, Margate, Broadstairs, Ramsgate, St Lawrence Deal, Walmer, and St Margaret's On the south east and south coasts there are Dover, Folkestone, Sandgate Hythe, Eastbourne, Seaford, Brighton, Worthing, Littlehampton, Bognor, Milford on Sea, and Southsea In the Isle of Wight there are Sea View, Cowes, Ryde, Alum Bay, Freshwater, Sandown, and Shanklin Further west we have Swanage, Weymouth, Lyme Regis, Seaton, Exmouth, and the Channel Islands On the north coasts of Cornwall and Devon we have St Ives, Newquay, Bude, Ilfracombe, and Lynton, and on the Bristol Channel Minehead, Weston super Mare, Clevedon, and Portishead. In Wales there are Tenby, Aberystwith, Barmouth, Beaumaris, Aber, Penmaenmawr, Llandudno, Colwyn, and Rhyl, and further northward there are Parkgate, West Kirby, Hoygate New Brighton, Southport, Blackpool and Fleetwood, and Grange on Morecambe Bay, Douglas and Ramsay in the Isle of Man, Silloth, in Cumberland and Ardrossan, Oban, Rothsay and Bute in Scotland On the coasts of Ireland, Bray, Howth, Kingstown, Dundrum, Holtwood, Queenstown, and Glengariff are suitable to those persons who enjoy a mild and equable but rather humid air Bundoran and Kilkee have the full influence of the Atlantic, as also Portrush and Port Stewart further north with a more bracing climate Rostrevor and Warrenpoint, though not actually on the sea, are still under its influence and have in addition the advantages of beautiful inland scenery and protection from wind The best season for these summer localities is from the end of June to the end of September, but they are often good until November, and many of them, as already mentioned, are desirable for certain cases during the whole of the winter

The localities in France which come nearest to the English seaside resorts are those on the north and north-west coasts, the best known of which are Dinard, Cabourg, Houlgate, Villers-sur Mer, Trouville, Deauville, Havre, Etretat, Fécamp, Dieppe, Tréport Berck sur Mer, St Valéry, Boulogne, and Dunkirk Further east on the Belgian coast, are Ostend, Blankenberghe, Heyst, and several smaller places and in Holland are Scheveningen and Zandvoort, near Haarlem, which are already under the more tonic influence of the North Sea This is still more the case

[1] Macmillan and Co. 1895.
[2] Text book to Meteorology 1871, p. 70

[3] Climate in the Treatment of Disease, Allbutt's System of Medicine 1896, vol. i., p. 269
[4] The Climates and Baths of Great Britain p. 7

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the winds of the Atlantic and have no shelter, but are much more sunny than our coasts. Arcachon is different—it does not lie on the actual coast but on a large inland salt basin which communicates with the Atlantic by a channel It is protected by large pine-forests which cover the dunes over which the houses of the so-called "Ville d'Hiver" are spread It reminds us somewhat of Bournemouth

INLAND CLIMATIC HEALTH RESORTS

Our inland climates are more limited in character than our sea climates, and the continent has greatly the advantage of Great Britain with regard to different degrees of elevation, of humidity, of insolation and of shelter We possess no Alpine and subalpine climates and no glaciers, and few inhabited localities open to health seekers exceed 1000 feet above sea level, but in Great Britain such elevations exercise in general a more bracing influence than elevations of about 3000 feet in many parts of the Alps do, partly on account of the surrounding sea and partly because there are rarely high mountains in the neighbourhood to prevent a thorough change of air The summers at a locality of 800 or 1000 feet elevation, are cooler, the air is more humid and therefore mostly less transparent, the sun is less hot and there is more wind The effect of these conditions is on many persons less exhilarating, but is more tonic and health-giving on the majority Where high elevation is required with glaciers, with rarefied and dry air, and with powerful insolation by day and cool nights, we must recommend Pontresina and other parts of the Oberengadin, the neighbourhood of Zermatt Montanvert above Chamonix, the neighbourhood of the Aletsch glacier, or Sulden, or Campiglio in the Tyrol Where somewhat lower elevations between 5000 and 1500 feet are desirable, with the drier and brighter air of the continent, the Alps, the Black Forest, the Vosges, the Hartz, the Auvergne, and the Pyrenees offer endess varieties combined with forest air or without it, but when only moderate elevation is demanded, from about 250 to 1000 feet, with fairly bracing climate, in pretty country, together with good accommodation, good sanitary arrangements, and nourishing food England, Wales, and Scotland are well provided Even within 50 miles of London the number of good localities is very great, although I must own that the accommodation at some of them is rather scanty I will only mention Tunbridge Wells, Southborough, Frant and the adjacent hills, Mayfield, Crowborough, Tatsfield, East Grinstead, Hindhead, Blackdown, Haslemere, and Liphook, Frensham Common and Thursley Common, Frimley and the Chobham Ridges south of Bagshot, Farnham Common Crooksbury Common and Crooksbury Hill, St Georges Hill near Weybridge, Epsom Downs, Banstead Downs, Hayward s Heath Cuckfield, and various places on the ridges between Redhill and Sevenoaks Further away we have Buxton and other places in the district of the Derbyshire Peak, Ilkley and its neighbourhood, Harrogate, Gilshead the Malvern District, the neighbourhood of Dartmoor, the Downs near Clifton, and various localities on and near the Mendips. Then there are the moorlands and high grounds in Cornwall between the Lizard and Redruth and between Bodmin and Launceston, some ground near Exmoor, Marlborough Downs, Ilsley Downs near Newbury, Highclere, and Kingsclere. These and many more localities which I could mention are partly to be regarded as health resorts of the future. The Lake District, with Keswick, Grasmere, Ambleside, Bowness, Windermere, Coniston, Ulleswater, and other places, offers by its beautiful scenery opportunities for pleasure as well as health These places can scarcely be called elevated health resorts although they are surrounded by mountains, and their character is more sedative than bracing Wales has many bracing health resorts such as Llandrindod, Llangammarch, Llanwrtyd, Lake Vyrnwy, Elan Valley Pen-y-Gulsyd, Llanberis, Capel-Curig, Beddgelert, and Trefriw Among the less bracing but still good summer resorts are Bettws-y Coed Llanrwst, Llangollen, Dolgelly, and Festiniog. Wales offers opportunities for further development. This remark applies still more to the Highlands of Scotland, the eastern portion of which has excellent climatic features. At present the principal localities are Braemar, Ballater, Grantown, Carrbridge, Kingussie, Forres, Strathpeffer, Blair Athol, Pitlochry, Tummel Bridge, Inversnaid, the Trossachs, Crieff, Moffat, and Bridge-of-Allan Ireland, too, has many inland places which may be used as climatic resorts such as Killarney, Mallow, Blarney, Ennis-kerry, Woodenbridge, and Dundrum, but they are less bracing

I have detained you already long, but I must ask you to allow me one or two other remarks. In a leading article in the *Times* a few weeks ago, the climate of England was designated as a "meteorological jumble of unpleasant things," and Americans often tell me that in England we have "no climate but only weather" I have in answer often endeavoured to give a definition of a "good climate" and have repeatedly said "A good climate is that in which all the organs and tissues are kept evenly at work in alternation with rest. A climate with constant moderate variations in its principal factors is the best for the maintenance of health. It calls forth the energy of the different organs and functions, their power of adaptation and resistance, and keeps them in working condition" Such are the climates of England and they belong to the most health giving in the world They produce the finest animals, the finest trees, and the finest men and women, and are most conducive to health and longevity There is sometimes, it is true, a storm or a series of unpleasant winds, but if the resisting powers of the organism have been kept in good condition by the habitual frequent changes of meteorological circumstances an occasional storm does no harm, while if the resisting powers have not been kept up by frequent, sometimes unpleasant, variations in the meteorological conditions a storm might lead to disease. The climates of England are, it is true, not the most exhilarating and agreeable, but the brightest climates, like those of Egypt, Spain, Italy, and Greece, are certainly not the best for health and strength We must endeavour to make the best of our climates by counteracting their defects and supplementing them with pleasurable additions Where there is absence of shelter from cold winds we must place high glass screens or high screens painted white in order to reflect the rays of the sun and thus increase the warmth on the sheltered walk. A winter garden, if possible, would be a great advantage, but if this is impossible, agreeable walks, level as well as gently rising, must be made and they must be rendered attractive by shrubs and flowers and must be provided with comfortable seats. Amongst these there must be a sufficient number of seats divided into four parts by high and covered partitions to give shelter from the prevailing wind and to a great degree also from rain This has been urged again and again and has been carried out, I am happy to say, at several localities, but neglected hitherto by many others and amongst them at some places which have otherwise many natural advantages and attractions but which owing to frequent occurrences of high winds urgently require such seats In a recent visit to Cornwall I was sorry not to find sheltered seats at promising places such as Falmouth and Penzance It is, I must repeat it, of the utmost importance that arrangements should be made at all health resorts that the invalid can spend almost the whole day without fatigue in the open air either sitting or in a reclining position and now and then taking a short walk. It is not only in tuberculosis that "open air treatment" is very useful but in almost every chronic complaint. I have for many years recommended it with due precautions in anæmia, in neurasthenia, general debility, tendency to rheumatic and catarrhal affections, and so on Good hotels with cheerful arrangements are another necessity They ought to be provided with light and sunny halls where visitors can take tea or coffee, listen to music, chat with one another, and play chess, draughts, cards, &c The garden and grounds ought to be provided with comfortable sheltered seats A good cook ought also to be regarded as essential These matters are more important than many of us are inclined to admit This was forced upon me again at the beginning of the year, when I stayed for some weeks at the Riviera Palace Hotel at Cimiez, at Cap Martin, and at San Remo There I met with several people who might as far as their health was concerned have stayed at English winter resorts to which they had been directed by their medical advisers Some of these persons had left the English resorts on account of the dulness, of the absence of cheerful, social rooms and halls, of music, and of flowers, and others because the cooking had not been to their taste But even if everything were done to render our climates as useful and agreeable as possible, it can scarcely be denied that there are many cases of chronic rheumatism or gout, especially in debilitated persons in which the drier, warmer, and sunnier climates of the Riviera are decidedly preferable It must be further acknowledged that there are many people in whom the resisting power to rough the meteorological influence of our climates is either permanently reduced, by senility or other organic changes, or only temporarily, for instance by acute

with the seaside places on the German coast—viz, Borkum, Norderney, Baltrum, &c, and the islands of Heligoland, Foehr, and Sylt. All these foreign localities have excellent sands for bathing. Some of them offer a gayer and more amusing life and altogether a peculiar charm which partly depends on the greater brightness and transparency of the atmosphere. These remarks apply especially to Ostend, Scheveningen, and Deauville and at all of them the English visitor meets with a greater change of food, accommodation, people, and manners and customs—circumstances which render such foreign places in certain cases preferable. To some families it is also an advantage that their children can learn a foreign language. In Denmark, Klampenborg, near Copenhagen, and Marienlyst, near Helsingör, are popular summer resorts. Somewhat different from ordinary seaside resorts are the places on the Baltic, being less stimulant but mostly provided with beautiful forests in their immediate neighbourhood. Düsternbrook, Travemünde, Doberan, Warnemünde, the island of Rügen (Putbus), Heringsdorf, Swinemünde, Misdroy, Colberg, Rügenwalde, Zoppot, and Cranz may be named. We may mention here that the example given by England in Margate and a few other places as to seaside hospitals, sanatoria, and convalescent homes is being largely followed on the continent. The French, so far as I know, were the first to move in this important matter on the continent. The Assistance Publique de Paris established, as far back as from 1860 to 1870, the sanatorium for scrofulous children at Berck sur Mer, the Œuvre des Hôpitaux Marins established similar institutions at Banyuls-sur Mer (Pyrenées Orientales) and at Saint Troyan (in the Island of Oléron), and there are besides sanatoria at Saint Pol sur Mer, at Pen Bron (near Le Croisic), at Arcachon, and at Hyères. In Germany the Society for Children's Sanatoria at German Seaside Places has sanatoria at Norderney, at Wyk, on the Island of Foehr, at Gross-Müritz, and at Zoppot. This is a subject of great public importance and well worth the attention of philanthropists and charitable societies. England, which first set the example, ought to be and to remain in front of other nations in this useful work.

Marine winter resorts.—With regard to these we cannot claim for England the same predominance as we have done for summer resorts. Although, as we have already said, the east coast is very useful to many cases also in winter we should not be justified in calling any places "winter resorts" excepting perhaps a few small sheltered spots, the largest of which is at St Margaret's Bay, near Dover. The principal localities are on the south east, south, south west, and west coasts. The furthest to the east are Hastings and St. Leonards. These places are scarcely warmer than London, but the South Downs which send forth a high spur to the sea give to them considerable shelter from the north, north-west, and north east. They are drier and more stimulating than most places further to the west, but they suffer from keen east winds during spring and are at that period not suitable to delicate invalids. Brighton is too much exposed to the east winds, but it has at least one fairly sheltered walk, and could, by means of grand artificial screens and nobly arranged winter gardens, be rendered more useful to a great number of health seekers. Dr Ewart[5] justly remarks in his report on Sussex "that various climates may really be found within Brighton." The autumn and first half of the winter offer to the inhabitants of London the greatest advantages. Brighton is then decidedly warmer than London, especially at night, and is mostly free from mist although the large increase of houses and population has led to a kind of smoke fog on windless days. Southsea has fairly mild winters and Ventnor, on the Undercliff of the Isle of Wight, maintains its reputation by the very fair results obtained at the Royal National Hospital for Consumption and in the town itself. Bournemouth and Boscombe have in addition to the shelter afforded by their situation the advantage of their fir plantations, but patients entirely confined to their rooms find the air sometimes too still. Salcombe, Sidmouth, Budleigh Salterton, Exmouth, Dawlish, and Teignmouth have fairly warm and equable winters, but their sheltered grounds are rather limited, while Torquay, owing to its bay being surrounded by three high hills, has a much larger space for exercise, not only on level but also on rising ground, from which a variety of the most beautiful views can be obtained. The Channel Islands are characterised by Dr Symes Thompson and Dr Lazarus-Barlow[6] as "mild, moist, and relaxing," but they are rather too windy to be used often as winter climates. Jersey is more protected than Guernsey. Rachitic children are very favourably influenced by this climate. Further west Falmouth and Penzance possess perhaps less shelter than Torquay, but they have, as their vegetation manifests, comparatively very mild winters, and in spite of a certain degree of humidity they exercise on most persons a decidedly tonic influence, and many persons even in advanced age suffering from winter coughs enjoy great freedom from their trouble at these localities and are able to spend on most days several hours in the open air. I need scarcely remind you of the favourable descriptions of Falmouth and Penzance given by Sir E. Sieveking[7] and Sir Joseph Fayrer[8]. Dr W. H. Dickinson[9] likewise speaks in favourable terms of Falmouth. The deaths from tuberculosis are somewhat fewer at Falmouth than at Penzance, but Dr Dickinson points out that this may be due to the older reputation of Penzance attracting a larger number of tuberculous immigrants. The Scilly Islands, although their climate is very mild and equable, are too much exposed to wind to be suitable to the treatment of phthisis, and they are as yet scarcely used therapeutically. The sea voyage and the isolation of the islands are great drawbacks. The north coasts of Cornwall and Devonshire are as yet not regarded as winter resorts, but St Ives and Ilfracombe have in winter certain advantages, although they are less warm and more exposed to wind than the best places on the southern coasts. It is a frequent complaint of sufferers from rheumatism that these troubles are aggravated in Devon and in Cornwall. Minehead and Weston super Mare are resorted to almost only in summer, but bronchitic cases mostly do well there up to November and even to December and Dr Mitchell Bruce[10] in his description of Somerset shares this experience. On the north coast of Cardigan Bay, in North Wales, Pwllheli deserves attention on account of its protection from cold winds. Llandudno, though principally a summer resort, offers also advantages in autumn and spring and to hardier invalids even in winter. More northwards, Grange, on Morecambe Bay, has fair shelter and can be used as a winter resort, and Rothesay, on the Isle of Bute, a favourite summer resort, has mild and equable winters, but it is too humid for most invalids, excepting chronic bronchitic cases. The same is still more the case with the Shetland Islands. Glengariff and Queenstown in Ireland have fair claims to be regarded as winter climates, but they both belong to the equable and humid class. The physiological character of all the coast climates of Great Britain compared with continental places is that they are more or less bracing—those of the east coast eminently so, those of the south and south west less so, and those of the west of Scotland and Ireland still less. The climates of the south-west coast of England and of the west of Scotland and of Ireland are to be regarded as sedative. They are generally called "relaxing," but this is not quite correct, as they are only so to a very limited class of persons who cannot bear a soft and humid air. On a large number of people these sedative climates exercise a more strengthening influence than those of the east coast. Some people complain of indigestion and biliousness, but as soon as they diminish the amount of their food, especially of meat, limit that of stimulants, and take some slight aperients and regular exercise, the indigestion and biliousness go away and do not reappear.

In comparing the marine winter climates of Great Britain with those of the Riviera, with those of Palermo, Catania, Aci Reale, and Taormina in Sicily, with Malaga, and with Corfu, our climates are wanting in sunshine, sun warmth, and in clearness of atmosphere and sky, and they have a greater number of rainy days and hours. There is also much more shelter from cold winds on the Riviera, and the direct sun warmth is there increased by the reflection from the rocks and the sea. These defects of our climates are to some persons so serious that they cause mental depression and the bodily health may even suffer from this cause. Intermediate between the comparative but by no means unbearable dulness of our coast climates and the luxuriant sunshine with shelter of the Riviera are some localities on the south-west coast of France—viz, Biarritz, St. Jean de Luz, and Arcachon. The two former are quite exposed to

[5] Ibid. p. 375.

[6] Ibid, p. 106.

[7] Brit. Med. Jour., Dec. 14th 1889.

[8] Ibid., August 29th, 1896.

[9] Allbutt's System of Medicine vol. iv, p. 402.

[10] The Climates and Baths of Great Britain.

the winds of the Atlantic and have no shelter, but are much more sunny than our coasts Arcachon is different—it does not lie on the actual coast but on a large inland salt basin which communicates with the Atlantic by a channel It is protected by large pine-forests which cover the dunes over which the houses of the so-called "Ville d'Hiver" are spread It reminds us somewhat of Bournemouth

INLAND CLIMATIC HEALTH RESORTS

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What, then, are the most recent results which have been obtained from typhoid stools using Elsner's medium as the means of isolating the typhoid bacilli? In this connexion the results of Pollak[11] Jemma,[12] and Richardson[13] require to be carefully considered These observers tested with great care the suspicious colonies found on the Elsner plates and their results may be accepted accordingly It is unfortunate that the same cannot be said of the work of Brieger,[14] Chantemesse,[15] and Sterling[16] The testing of these observers was inefficient or absent and in all probability therefore many colon bacilli were included among those termed by them "typhoid" Their results need not detain us

Passing now to the observations of the three former observers we find that (1) Pollak (Prague, 1896) examined 13 typhoid cases and in all of them in observations made during the first and second weeks of the disease he was able to demonstrate the presence of typhoid bacilli in the stools, (2) Jemma (Genoa, 1897) records 20 similar cases and in all of them, though not invariably at the first attempt, he was able to find the bacilli in the stools within

[5] Deutsche Medicinische Wochenschrift, 1885, p. 500.
[6] Centralblatt für Klinische Medicin, 1887 p. 393.
[7] Centralblatt für Bakteriologie, 1889 p. 65.
[8] Ibid. 1890, p. 273.
[9] Annales de l Institut Pasteur 1895.
[10] Zeitschrift fur Hygiene, vol xxi. 1893, p. 25.
[11] Centralblatt für Innere Medicin 1896, p. 725.
[12] Münchener Medicinische Wochenschrift, 1897 No. 33.
[13] Brit. Med. Jour 1897 Dec. 25th p. 1842 Boston Medical and Surgical Journal, 1897 p. 443.
[14] Deutsche Medicinische Wochenschrift 1896, p. 835.
[15] Comptes Rendus, 1896.
[16] Centralblatt für Bakteriologie Band xxii. 1897

I have detained you already long, but I must ask you to allow me one or two other remarks In a leading article in the *Times* a few weeks ago, the climate of England was designated as a "meteorological jumble of unpleasant things," and Americans often tell me that in England we have "no climate but only weather" I have in answer often endeavoured to give a definition of a "good climate" and have repeatedly said "A good climate is that in which all the organs and tissues are kept evenly at work in alternation with rest. A climate with constant moderate variations in its principal factors is the best for the maintenance of health. It calls forth the energy of the different organs and functions, their power of adaptation and resistance, and keeps them in working condition" Such are the climates of England and they belong to the most health giving in the world They produce the finest animals, the finest trees, and the finest men and women, and are most conducive to health and longevity There is sometimes, it is true, a storm or a series of unpleasant winds, but if the resisting powers of the presence of the typhoid in good condition by the habitual fæces Under these circumstances in circumstances an occa- further careful observations should be made [illegible] powers have stages of the disease and accordingly the following [illegible] examinations were undertaken

The method pursued was as follows The stool having been obtained without contamination with urine was diluted in broth and then from two to six drops of the dilution were spread over the surface of two, or often three, Elsner plates. These were incubated at 20° C and were inspected after 24, 48, and 72 hours All suspicious colonies were further examined by making a gelatin shake culture If gas bubbles formed in this after 24 hours the colony was evidently not typhoid If no gas formed it was examined further Finally, no micro-organism was accepted as typhoid unless it answered the following tests —(1) morphology the microbes consisted of long rods with some longer forms, exhibiting (2) marked motility, possessing (3) 8–12 cilia, (4) shake gelatin and shake dextrose gelatin (2 per cent sugar) cultures gave no gas even after one month, (5) peptone broth cultures yielded no indol even after one month, (6) litmus milk cultures showed no coagulation even after one month and the reaction became slightly acid within 24 hours, (7) serum reaction positive result The serum used in Cases 1 and 2 was that of a guinea pig immunised against typhoid, a dilution of 1 in 1000 being used In Case 3 (both urine and fæces) the serum from a typhoid patient was used The isolated bacilli were found to clump with it up to the same dilution—namely, 1 in 1000—as did the laboratory typhoid culture Lastly, the bacilli isolated from the urine and fæces of Case 3 were tested by (8) the media of Proskauer and Capaldi, I and II, and they reacted to each like typhoid. It may be well here to add that the Elsner medium used was repeatedly tested to see whether typhoid bacilli did grow on it in the typical manner and that this was always found to be the case Any negative results obtained, therefore, cannot be attributed to faulty media.

Proceeding on these lines the results which I have obtained are as follows They are well shown in Table I

Briefly put, the results which I have obtained from the 29 stools examined may be thus summed up 1 Three patients were examined on or before the seventeenth day of the disease, and in each at the second examination, on the eleventh, fourteenth, and seventeenth days respectively typhoid bacilli were found in the stools. In one case many were present, in one case in fair numbers, and in the last case but very sparsely These were the only cases examined early in the disease, and the positive results obtained agree with those of Jemma, Pollak, and Richardson 2 The remaining stools were obtained as follows (*a*) seven during the later stages of the initial attack on the following days—eighteenth, nineteenth, twenty first, twenty-fifth, twenty-fifth, twenty-eighth, and thirty-second days, (*b*) one between the attack and first relapse, (*c*) five during a first relapse at all stages of the same, and (4) seven during convalescence on the following days after final defervescence—the third, fourth, sixth tenth, eleventh, thirteenth, and twentieth Of these 20 observations made during the later periods of the disease only one gave a positive result—

[17] Transactions of the Royal Medical and Chirurgical Society, vol lxxx 1897

with the seaside places on the German coast—viz, Borkum, Nordeney, Baltrum, &c, and the islands of Heligoland, Foehr, and Sylt. All these foreign localities have excellent sands for bathing Some of them offer a gayer and more amusing life and altogether a peculiar charm which partly depends on the greater brightness and transparency of the atmosphere These remarks apply especially to Ostend, Scheveningen, and Deauville and at all of them the English visitor meets with a greater change of food, accommodation, people, and manners and customs—circumstances which render such foreign places in certain cases preferable To some families it is also an advantage that their children can learn a foreign language In Denmark, Klampenborg, near Copenhagen, and Marienlyst, near Helsingör, are popular summer resorts Somewhat different from ordinary seaside resorts are the places on the Baltic, being less stimulant but mostly provided with beautiful forests in their immediate neighbourhood Düsternbrook, Travemünde, Doberan, Warnemünde on account of Rügen (Putbus) Heriffices connected with the case I venture, Rügenwalde, to add a few words on this subject In selecting a locality we must always bear in mind not only the purely climatic qualities of the place but also the nature of the *accommodation there, including the cooking, the class of* people frequenting it, the social conditions and amusements, and the manner in which the sum total of agencies, climatic and social, is likely to influence the person who asks our advice Our wish should be that the invalid should derive as much benefit as possible If we have reason to think that he or she will be satisfied with the best climatic conditions, good medical advice, and fair accommodation alone, our decision will be comparatively easy If, however, we have to deal with an invalid to whose mental condition the amusements and all the social aspects of a place are essential, we must endeavour to find one where these are combined with good climatic and hygienic qualities, and we may have even to sacrifice some climatic advantages for certain invalids if we have reason to suppose that they will become depressed and unhappy at a certain climatically suitable place Experience abundantly shows us that however good the climatic elements may be mental dulness causes in certain types of people manifold functional troubles, such as want of appetite, dyspepsia, imperfect action of the bowels, weakness and irregularity of the heart's action, inability to take exercise, sleeplessness, and loss of weight Every one of you has probably met with persons who are happy, who can work, who can take exercise, who eat and sleep, who have a clear urine and regular action of the bowels, and who gain weight, if they are at a warm and sunny locality and have flowers and music, while on the contrary they become depressed, they lose their appetite, they become sleepless, they cannot work, they have a urine loaded with lithates, they lose weight, or they occasionally become morbidly fat, if they are obliged to be at a locality which is cold, damp, misty, sunless, and without music, flowers, or butterflies There are many persons, principally so-called "people without nerves," who cannot understand and appreciate such differences in the condition of delicate persons These conditions, however, are not imaginary, they are fearfully real and ought not to be overlooked in giving advice about climatic resorts Such conditions as these must move sometimes the balance in favour of continental places, although we know that, were it not for the invalid's peculiar mental conditions and tendencies, an English resort would be equally good or even preferable For these reasons it is important to make our English resorts as agreeable as possible by accommodation, food, music, promenades, and shelters

Many other circumstances partly hinted at before, which have nothing to do with purely climatic matters, demand our consideration There are, for instance, nervous persons who become excessively frightened by very slight functional disorders and, in consequence, become almost sleepless and sometimes sick and really ill, until they can be reassured by a medical attendant who has their confidence In such cases we must always think of a place where a medical man resides who is likely to be sympathetic to our invalid, and to gain authority over the patient and to use it for his good In such cases the medical man is of the first importance The climatic resort may not have any specially good qualities, but the mental influence exercised by the medical adviser will more than balance the climatic defects of the place The physician is, indeed, a very important part of every health resort.

Sea bathing is a very important factor in the treatment of many chronic diseases, and it is a very important factor in the climatic treatment of Penzance. The climate of Penzance is very moist, and relaxing," but they are rather too windy to be used often as winter climates Jersey is more protected than Guernsey Rachitic children are very favourably influenced by this climate Further west Falmouth and Penzance possess perhaps less shelter than Torquay, but they have, as their vegetation manifests, comparatively very mild winters, and in spite of a certain degree of humidity they exercise on most persons a decidedly tonic influence, and many persons even in advanced age suffering from winter coughs enjoy great freedom from their trouble at these localities and are able to spend on most days several hours in the open air I need scarcely remind you of the favourable descriptions of Falmouth and Penzance given by Sir E Sieveking[7] and Sir Joseph Fayrer[8] Dr W H Dickinson[9] likewise speaks in favourable terms of Falmouth. The deaths from tuberculosis are somewhat fewer at Falmouth than at Penzance, but Dr Dickinson points out that, despite the judicious and properly restricted [illegible] reputation of Penzance The [illegible] which act pleasurably on our senses Such means as these stimulate the circulation in the brain and we often succeed more or less in improving by them the nutrition of this organ which again acts most powerfully on the heart and on the blood vessels, especially the vaso-motor portion, and often *effects very remarkable changes in all the organs* of the body and causes improvement or cure of many chronic ailments

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ON THE RESPECTIVE PARTS TAKEN BY THE URINE AND THE FÆCES IN THE DISSEMINATION OF TYPHOID FEVER[1]

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AT the present day the view that typhoid fever is propagated by means of the excreta is unanimously held. It is probable also that in the opinion of the great majority the fæces are still regarded as the chief, if not the sole, means whereby the dissemination of the disease takes place. Now, it is of course true that the fæces are to a considerable extent responsible for spreading the disease, but recent work has shown that another excretion—namely, the urine—is often intensely infectious in typhoid fever, and that it therefore must play a great part in spreading the disease.[2] From a hygienic point of view it is obviously of great importance that we should be able to estimate, even approximately, the danger of infection which may be expected from each of these excretions, and especially that we should have accurate knowledge as to the period of the disease at which each attains its maximum virulence. It is proposed therefore in this paper to sum up the actual state of our knowledge *concerning the infectious* nature of the urine and fæces respectively, at the same time adding some further observations which bear upon this subject.

PART I.—THE FÆCES

Before stating the results of the latest observations which have been made on typhoid stools it will be well to recall some of the earlier ones, for it is upon these—though now known to be incorrect—that the present general idea of the intensely infectious character of typhoid stools throughout the whole course of the disease in reality depends

The typhoid bacillus was discovered by Eberth[3] in 1881 and first cultivated by Gaffky[4] in 1884 Gaffky himself did not profess to be able to demonstrate the presence of the bacilli

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[1] The expenses in connexion with this research were in part defrayed by a grant from the Royal Society

[2] It is not contended of course that other matters, such as sputum or pus, may not occasionally be at fault, but dissemination through them must be extremely rare and need not now be discussed.

[3] Virchow's Archiv, 1880, Band lxxxi; 1881 Band lxxxiii.

[4] Mittheilungen aus dem Kaiserlichen Gesundheitsamte, 1884, Band ii

liminished, though how soon they become absolutely harmless cannot as yet be settled by bacteriology

Finally, when typhoid bacilli have been described in the fæces long after defervescence—e g, in Lazarus's case, 41 days after—we are dealing almost certainly with fæces contaminated with urine and not with pure fæces

PART II —THE URINE

The possibility of the urine being infectious in typhoid fever is not altogether a recent suggestion. The view seems to have been originally put forward by Seitz[22] in 1886 and since this date various other observers have drawn attention to the subject As I pointed out, however, in a paper communicated to the Royal Medical and Chirurgical Society in 1896[23] no definite reliance could be placed on any of the earlier observations for the simple reason that the tests up to that time applied to the isolated bacilli were not sufficient to differentiate them from bacillus coli communis and that many of the so-called typhoid bacilli obtained from urine were in all probability nothing more than colon bacilli I showed, however, from observations then recorded (1) that after eliminating this source of error, without doubt in some, though not in all, cases of typhoid fever true typhoid bacilli do occur in the urine, also (2) that "when the bacilli do occur they only occur towards the end of the disease—that is to say, during the third week or later their presence, therefore, could rarely if ever be of assistance in diagnosis", and (3) that "when they do occur they are present in considerable numbers and that not uncommonly if a drop of such urine be dried and stained the bacilli may be at once seen under the microscope, occasionally also the urine may be rendered turbid by the enormous quantities of bacilli passed"

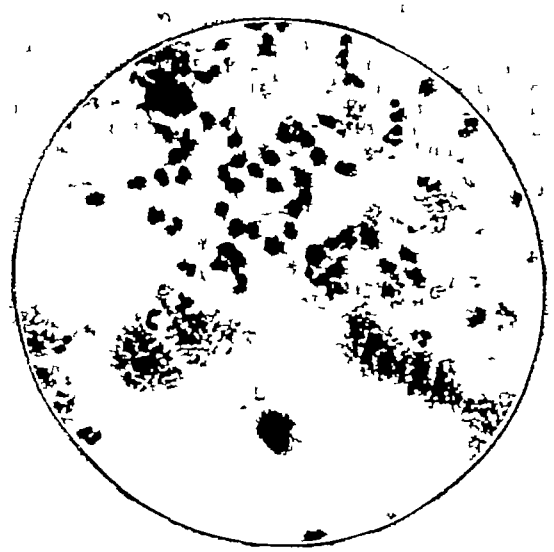
These results being unexpected, but nevertheless, if true, of some importance, it becomes interesting to inquire whether they are borne out by later observations This indeed has been the case Thus Richardson[24] in 1898, working in Professor Wright's laboratory in Boston, examined the urine of 38 cases of typhoid fever, and in nine of them—i.e, in 24 per cent—found the typhoid bacilli He also concluded "that when they do occur they are always present in large numbers and in practically a pure culture, and that they first appear in the later stages of the disease and persist often far into convalescence." It will be seen at once that these independent results of Richardson almost exactly agree with my own conclusions

With regard also to the possibility of such enormous quantities of typhoid bacilli occurring in the urine as to render it turbid we have direct confirmation given by the observations of Petruchsky[25] He examined 50 typhoid urines with regard to this point alone and in three of them he found this dangerous phenomenon to occur Thus he found that in one case the urine became "turbid with bacilli" towards the end of the attack and remained so for 10 weeks, only ceasing to contain typhoid bacilli seven weeks after final defervescence In the second case the turbidity first occurred 10 days after defervescence and the bacilli continued present for four and a half weeks Lastly, in the third case the bacilli were first observed six days after the temperature had become normal and remained present in this case only eight days There can, therefore, no longer be the slightest doubt that typhoid bacilli may not very infrequently occur in the urine in extraordinary quantities—in one of Petruchsky's cases, indeed, they amounted to 172,000,000 bacilli in each cubic centimetre of urine

As, however, the condition is not yet fully recognised it may be well to record yet another example of it, in this case associated with a certain amount of pyuria. I am much indebted to Sir Dyce Duckworth for his kind permission to publish notes of the case They are as follows.

"The patient, aged 22 years (referred to in Table I as Case 3), was admitted into St Bartholomew's Hospital on Oct. 28th, 1898, suffering from typhoid fever, this being the eighth day of his disease On admission his temperature was 104° F, he was somewhat deaf and also rather drowsy There was a most copious eruption of rose spots The abdomen was a little distended and the patient complained of slight abdominal pain The spleen was not felt The urine was acid and contained no albumin Next day the serum reaction was obtained at a dilution of 1 in 200 The fever ran its usual course, remaining up for some time and then gradually falling by lysis It reached normal on the twenty first day, on Nov 10th The temperature then remained down for nine days, but on the tenth day (Nov 20th) it began to rise again and the patient had a mild relapse This lasted from Nov 20th to Dec 4th, after which the temperature remained down for good and the patient made a rapid recovery The condition of the urine was as follows It was natural on admission and apparently remained so until the day before the relapse on Nov 19th On this date, however, it was noticed that the urine though still acid contained pus and also showed a cloud of albumin Bacilli were also noticed under the microscope, no bacteriological examination was, however, made The pyuria continued throughout the relapse and on Nov 29th the urine was examined in greater detail It was then found to be neutral, to contain a cloud of albumin and also a little pus, enough to form a slight sediment at the bottom of the urine-glass It was, however, also turbid, a condition not due to the small amount of pus present but to the fact that under the microscope it was found to be swarming with bacilli These on cultivation answered correctly to all the tests enumerated at the commencement of this paper and proved themselves to be, therefore, a pure culture of the typhoid bacillus On Dec 3rd, the last day of the relapse, the condition of the urine was unchanged, except that the bacilli in the urine were now all "clumped" There had been an indication of this on Nov 29th, but now it was very marked (*vide* Fig 1) On Dec 6th the temperature had been normal for two days The urine still contained a little pus, a faint cloud of albumin, and many typhoid bacilli, still in clumps (*vide* Fig 2) A week later, however, the condition had altered, for on Dec 13th the urine was clear, neutral, 1012, and contained no albumin, no bacilli, or pus On Dec 17th the urine was again examined It was natural, contained no albumin or pus, and cultures again showed the absence of typhoid bacilli."

FIG 1



A drop of the urine in Case 3 passed on Dec. 3rd (the last day of the relapse) dried on a coverglass and stained. Innumerable typhoid bacilli in large clumps are seen also many pus cells. (Photographed by Dr Norman × 400)

It will be seen, therefore, that in this patient the pyuria began on the thirtieth day of the disease, just before the commencement of the relapse, lasted through the relapse, and persisted for some few days into convalescence On three occasions on which the urine was examined bacteriologically during this condition it was found to be swarming with a pure culture of typhoid bacilli, and it is probable also that the latter made their first appearance with the pus on Nov 19th, for the urine was then first noticed to contain bacilli, though their real nature was not recognised until later Moreover, the bacilli persisted into convalescence

[22] Bakteriologische Studien zur Typhus-Aetiologie, München, 1886.—
[23] Transactions of the Royal Medical and Chirurgical Society vol. lxxx. 1897
[24] Journal of Experimental Medicine, vol. iii., May, 1898.
[25] Centralblatt für Bakteriologie, vol. xxiii., April, 1898.

[illegible], the one taken shortly before a relapse occurred In the other 19 stools no typhoid bacilli could be demonstrated

Consideration of results —There are not many observations which it is possible to compare with the above, for workers in this field have for the most part confined themselves to the early periods of the disease Those also which may be collected from the literature must to a certain extent be discounted when positive, owing to the fæces not having

TABLE I —*Observations made on Typhoid Stools (obtained separate from urine) for the most part in the Later Stages of the Disease*

No.	Age and sex	Date.	Day of disease.	Character of stool.	Result.
1	24 F	Jan. 20, 1898	8th } Attack	Semi solid	—
		, 23	11th	,	+
		,, 27,	15th	,	—
		Feb. 18,	T N, 20 days	Solid	—
2	16, M.	Jan. 17, ,	13th } Attack	Semi solid	—
		, 21,	17th	Solid	+
		, 29,	25th	,	—
		Feb 5 ,	32nd	Semi-solid	—
		, 11, ,	T N., 5 days	Solid	—
		, 14 ,	? 1st day of a relapse	,	—
		March 4, ,	T N 6 days	Semi-solid	—
3	22, M.	Oct. 29, 1898	9th } Attack	Peasoupy	—
		Nov 3, ,	14th	,	+
		,, 7 ,,	18th	,	—
		, 10, ,	21st	Semi-solid	—
		,, 14 ,,	T N 4 days		+
		, 20	1st day of relapse	Solid	—
		, 24, ,	5th ,		—
		,, 28, ,	9th , ,	,,	—
		Dec. 6	T N 3 days	,,	—
		, 13,	T N 10 days	,,	—
4	9 M.	, 30 1897	19th day	Peasoupy	—
		Jan. 5, 1898	25th day		—
		, 28, ,	T N 13 days	Formed	—
5	42, M.	Dec. 18, 1897	2 days before end of long relapse	Semi solid	—
		, 31, ,,	T N 11 days	Solid	—
6	18, M.	Jan. 2, 1898	T N 4 days after relapse	Semi solid	—
7	21, M.	Dec. 13 1897	28th day	,	—

* + signifies a positive result, typhoid bacilli being found in the stools. — signifies a negative result, typhoid bacilli not being found T N = Temperature normal.

REMARKS.—*Case 1* was a very mild attack of typhoid fever The temperature reached the normal on the sixteenth day —*Case 2.* The attack was severe, in that the fever lasted for 32 days. Later phlebitis occurred. There was no diarrhœa and no typhoid state.—*Case 3* The attack lasted 21 days and was followed by a relapse. Pyuria was present from Nov 19th to Dec. 6th. There were many typhoid bacilli in the urine during this condition, but none in the fæces.—*Case 4.* This was a severe attack, the temperature remaining high for 35 days. There was much diarrhœa.—*Case 5* The patient had a long attack followed after an interval by a long relapse.—*Case 6.* The patient had an attack of moderate severity followed by one relapse.—*Case 7* In this case the temperature reached normal on the twenty-ninth day

been carefully separated from the urine, a serious source of error thereby being introduced With this reservation it may be noticed that Jemma,[18] in addition to his numerous positive observations within the first two weeks of the disease, also had two positive results on the fifteenth and eighteenth days but six negative results on the twenty second, twenty-fourth, twenty seventh, thirtieth, thirtieth, and thirty third days respectively, and also once in a relapse two days before the temperature reached normal, Pollak[19] also quotes three positive results on the seventeenth, nineteenth, and twentieth days, and in two out of three cases was able to find the typhoid bacilli during a relapse, Lazarus[20] examined the stools of 16 convalescents and found the bacilli in the stools in only three, and lastly, Richardson,[21] who examined 23 stools from 13 convalescents, was only able on one occasion (the day following final defervescence) to find the typhoid bacilli All the other stools yielded a negative result.

It will be noticed, therefore, that former observers also found considerable difficulty in demonstrating the typhoid bacilli in the stools late in the disease and during convalescence—a fact which is brought out more clearly when we remember that probably in many of their so-called positive results the bacilli found were not really in the fæces but in the urine It would seem, then, from a consideration of all the cases that we are justified in stating that it is extremely difficult and as a rule impossible to find the typhoid bacilli in the stools in the later periods of the disease (unless in connexion with the commencement of a relapse) and also during convalescence, though in the early stages they can as a rule be found with comparative ease. Negative results, however, such as these are notoriously fallacious We must therefore consider them very carefully to see what conclusion may legitimately be drawn from them The question to be answered, in fact, is this Are we justified in concluding that because typhoid bacilli cannot be found in the stools in the later stages of the disease and during convalescence therefore they are really not there?

To this question a negative answer must be at once returned We must remember first that our method for demonstrating the typhoid bacilli in stools is at the best unsatisfactory It consists, as we have seen, in taking a trace of the stool and then diluting this in broth and finally making plates with this dilution, this great dilution being necessitated by the enormous quantities of colon bacilli present, so that were it not done the individual colonies could not grow isolated from each other and thus be distinguished Now, it is obvious that unless the typhoid bacilli were present in considerable numbers they might easily escape detection since they might fail to be present in the minute trace of stool which alone we are able to examine (This, for example, must almost certainly be the explanation of the failure to find the typhoid bacilli on the eighteenth and twenty first days of Case 3, since four days later, previously to a relapse, a recrudescence occurred and they were again present in large numbers)

Again, in support of the views that the bacilli are very probably present in the stools in small quantities for some considerable time after they cease to be demonstrable there is the fact that post mortem typhoid bacilli as often be found in the gall bladder even in pure culture—at a time, that is to say, when they can no longer be found in the fæces Now, these would almost certainly pass with the bile into the intestinal canal and hence might reasonably be expected in the fæces This argument, however, must not be pressed too far, for it was shown some little time back by Walthelet that if colon and typhoid bacilli were grown together in broth in a very short time the colon bacilli alone survived, and again, that if the typhoid bacillus was inoculated into a broth tube containing the toxins of bacillus coli it would not grow and speedily died. Now these are not unlike the conditions which obtain in the alimentary canal in typhoid fever It is well known that in this disease the virulence of the colon bacillus becomes greatly enhanced, and it may be that when the disease has run a certain course the typhoid bacilli may in favourable cases be first impeded in their growth and finally rapidly destroyed in the intestinal tract through the action of the colon bacillus If this be so our inability to find them in the stools later in the disease would find a ready explanation This, however, as yet is speculation and at the present moment the following conclusions only would seem to be justified with regard to the presence of the typhoid bacilli in the stools

General conclusions —The stools of a typhoid patient separated from the urine contain typhoid bacilli in fair quantities, demonstrable by our present methods up to about the beginning of the third week After this date the number begins rapidly to diminish, so that our methods no longer avail as a rule to find them If, however, a relapse occurs it may be preceded by a recrudescence of the typhoid bacilli which can then be found again in the fæces, but during the greater part of the relapse itself and throughout convalescence the typhoid bacilli cannot be found in the stools

It follows from the above that the stools of a typhoid patient must always be regarded as highly infectious during the early stages of the disease, and may again become so in connexion with the commencement of a relapse This highly infectious character, however, soon becomes greatly

[18] Loc. cit. [19] Loc. cit.
[20] Berliner Klinische Wochenschrift, 1895 Dec. 9th, p. 1063
[21] Loc. cit.

if necessary to a bacteriological, examination Thus in Richardson's nine positive cases (a) eight showed "a faint trace or a trace of albumin" one only from a "thick cloud up to one-eighth albumin,' but, as he himself shows, of his 29 negative cases 15 contained albumin and on an average more than was found in those cases which contained bacilli. So also as regards the presence of casts Again, (b) in two of my cases, while very numerous bacilli were present, the urine was clear and contained no albumin. So also in one of Petruchsky's cases Sometimes, also, (c) pus has been present in the urine with the bacilli (Blumer, two cases, so also in the case recorded in this paper)

It is evident therefore that the urine presents no constant characteristics in these cases Most frequently it would seem to contain a trace of albumin but it may contain a good deal, it may contain pus Sometimes also it may be absolutely natural.

6 *The clinical course of these cases*—It will be instructive to inquire whether the typhoid cases in which the bacilli are found in the urine run a more severe course than those in which this phenomenon does not occur Richardson is of opinion that such is the case, and certainly of the 15 cases mentioned above five died (a mortality of 33 per cent.), while of the 45 in which typhoid bacilli were not present in the urine only two died (or 4 4 per cent) It is very questionable, however whether these figures accurately represent the state of the case. Certain it is that in the five cases in which the urine was "turbid" from the millions of bacilli present recovery took place in each Moreover, in four of them the phenomenon occurred during convalescence, and throughout its whole duration the patients seem to have suffered from no bad symptom whatever This certainly was the case in the patient whom I had the opportunity of watching myself During the occurrence of the bacilluria he was rapidly getting well and complained of absolutely nothing It would seem, therefore, that the prognosis in a given case should be unaffected by the occurrence of the bacilli in the urine.

7 *On what does the condition depend?*—Unfortunately at present no definite answer can be given to this question owing to the lack as yet of post-mortem examinations in suitable cases On the whole it would seem most probable that the condition is due to local changes set up in the kidney by the growth there of the typhoid bacillus, an occasional microbe having been carried thither by the blood stream It is, without doubt, *not* due to a mere filtration of typhoid bacilli out of the blood The matter, however, requires further investigation

General conclusions.—The conclusions, then, which we are justified in arriving at with regard to the infectious character of the urine in typhoid fever are as follows 1 It can no longer be doubted that typhoid bacilli occur in the urine of typhoid patients, probably in about 25 per cent of all cases 2 For the most part, though present in such numbers as to be demonstrated bacteriologically with the greatest ease, they are not present in sufficient quantity to alter the naked-eye appearance of the urine. In a smaller proportion of cases, however—probably about 5 per cent. of all typhoid cases—the urine is rendered turbid by their presence. They are nearly always in pure culture 3 They occur first late in the disease, rarely if ever before the third week, and may make their first appearance during convalescence. 4 They generally remain present for some considerable time, for some weeks or even months 5 The character of the urine does not assist in diagnosing the condition (unless of course it be rendered turbid by the bacilli) It may contain no albumin, often contains but a trace sometimes has a good deal, and sometimes has pus, all of which conditions occur quite apart from the presence of typhoid bacilli in the urine 6 The prognosis of a case is not rendered more grave by the occurrence of this condition

Finally, it may be well to contrast the infectious character of the fæces with that possessed by the urine, for in many points the two are dissimilar In the first place, it must be noticed that whereas the fæces contain the typhoid bacilli in apparently every case this does not obtain with the urine. Probably, indeed, in not more than 25 per cent. of all typhoid cases does the urine present this phenomenon. Secondly typhoid stools are without doubt most dangerous early in the disease—within the first three weeks The typhoid urine, however, only becomes dangerous towards the end Thirdly typhoid stools may contain considerable quantities of typhoid bacilli but very rarely if ever, do they contain such myriads as may be present in the urine

In conclusion, we may ask which excretion must be regarded as the most dangerous and chiefly responsible for spreading the disease It would seem on the whole that the palm must be given to the urine and this partly on account of the enormous numbers of bacilli which may occur in it and partly on account of the nature of the excretion itself Thus, the stools by their colour and odour at once attract attention, so that the slightest soiling of the linen is at once noticed and the damage rectified, but the same cannot be said of the urine A minute drop from a suitable case may contain some 6000 bacilli—adhering to the end of the penis or to the vulva after micturition, it would infect the linen and could not but escape detection It is probable, indeed, that in such cases we have the explanation of the fact that even after all precautions have been taken those attending on typhoid patients not so very rarely catch the disease It would seem, in fact, at the present moment that this occurrence must be sometimes unavoidable [28] Indeed, when we come to think of the matter it is really astonishing, considering the opportunities of infection which undoubtedly exist, that these cases do not occur more often It is a strong argument in support of the view that some other conditions must pre-exist, possibly in connexion with the bacterial flora of the alimentary canal, without which typhoid fever will not occur even should the typhoid bacillus be introduced

It may be well as a last word to repeat again the obvious moral which should be drawn from these facts, for as facts they must be regarded It is that in all cases of typhoid fever "the urine must be regarded as highly infectious and the same precautions should be taken with regard to it both during the disease and also during convalescence as have now for some years past been adopted in the case of the fæces" If it is logical and wise to take precautions with regard to the one it is equally so with regard to the other In this way only shall we be able to guard against the obvious dangers to which this condition exposes us Should, moreover, the condition be proved to be present in a given case by bacteriological examination it would probably be wise to try the administration of urotropin, 10 grains being given by the mouth three times a day Richardson, to whom I am indebted for the knowledge of this drug, found in two cases that the bacilli totally disappeared from the urine for good after 48 hours of such treatment, and quite recently Dr Gee and Dr Andrewes have had an exactly similar experience in a case at St Bartholomew's Hospital In this case salol (five grains three times a day) was first tried for three days, but with absolutely no effect. At the end of this time the typhoid bacilli were still present in enormous quantities in the urine The patient was then put on 10 grains of urotropin three times a day and at the end of 48 hours the urine had become absolutely sterile and remained so

I am much indebted to Dr Gee and Dr Andrewes for their kind permission to mention this case and thus to assist in drawing attention to what promises to be a valuable remedy for this most dangerous condition

Addendum—Since the above was written Richardson's full paper on this valuable drug has appeared [29] Nine cases of typhoid fever, the urine of which contained typhoid bacilli and in which urotropin was used, are there recorded In eight of them the bacilli disappeared at once and permanently after the administration of the drug for a few days only, while in the ninth case they were eliminated after the drug had been given for rather a longer period It is difficult therefore to resist his contention that since it is impossible without a bacteriological examination to tell whether or not a urine contains typhoid bacilli, all typhoid patients should be given small doses of urotropin (10 grains three times a day or even less), commencing with the third week of the disease It is a treatment at all events, which in the interest of those who nurse typhoid cases, assuredly deserves a trial

Upper Brook street, W

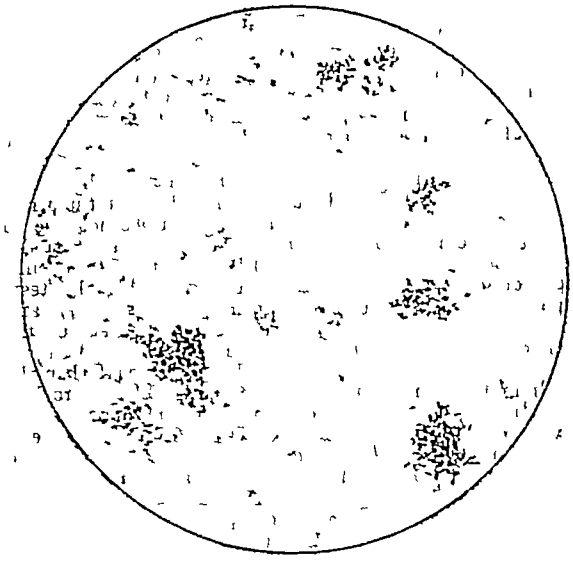
[28] Is it not possible also that the urine may have been at fault in the case of the great Caterham outbreak of typhoid fever in 1879, so ably investigated by Sir Richard Thorne Thorne? It has always been a stumbling block how the fæces of one man could contain sufficient bacilli to contaminate the whole water-supply The theory adopted that the bacilli multiplied in the water is hardly satisfactory If however we assume that the man was one of the severe "turbid-urine" cases which as we have seen, may contain as many as 172,000,000 typhoid bacilli in each cubic centimetre of urine, everything would be explained.

[29] Journal of Experimental Medicine 1899, vol. iv, p. 1.

and finally disappeared with the pus Probably, therefore, the urine contained typhoid bacilli for about three weeks

The case is of interest, then, in showing how enormous may be the number of typhoid bacilli in the urine It also shows that though pyuria in typhoid fever is generally due to infection by bacillus coli communis, yet it may be brought

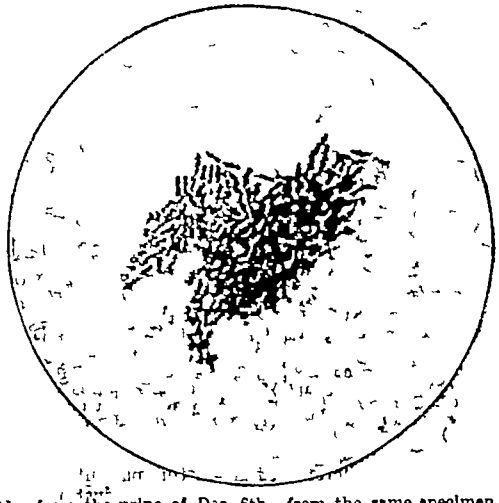
FIG 2



A drop of the urine in Case 3 passed on Dec. 6th—i.e. two days after the temperature had fallen to normal for good dried on a coverglass and stained with gentian violet. The urine was obtained immediately after it had been passed and the preparation was at once made. Many clumps of typhoid bacilli are still seen but only a few pus cells. (Photographed by Dr Norman × 350)

about through the agency of the typhoid bacillus itself, as indeed it was in one of Blumer's cases [26] It may be noticed, also, in connexion with this case that the stools were examined on four occasions during the pyuria—and in each case with a negative result—that is to say, while the urine was swarming with typhoid bacilli none could be obtained from

FIG 3



Also from the urine of Dec. 6th from the same specimen as Fig 2. A clump of typhoid bacilli is shown under a higher power The rod shaped bacilli are well seen. (Photographed by Dr Norman × 1000.)

the stools (at this later stage of the disease) The importance of collecting the stools uncontaminated by urine is thus emphasised It is important also to note that the blood was examined for the presence of typhoid bacilli on Dec 3rd and Dec 6th, but on each occasion with a negative result. This tends strongly to show that the very copious excretion of typhoid bacilli in the urine in these cases must be due to some local change in the urinary tract and not to a filtration of bacilli from the blood

It will be instructive now to add together all the most recent observations made on typhoid urines, so that by a general survey of a larger number of cases we may find out in what proportion of cases and under what conditions the bacilli occur in the urine

1 *In what proportion of cases does the condition occur?*—To answer this question we have the following observations —

TABLE II

—	Number of cases observed.	Positive results obtained.	Negative results.
Richardson	33	9	29
Horton Smith	12	4	8
Blumer	10	2	8
Total	60	15	45

Thus typhoid bacilli have been observed at some period of the disease in the urine in 15 out of 60 cases, or in just 25 per cent of cases

2 *How often may we expect the urine to contain the bacilli in such enormous quantities as to render it turbid?*—In this connexion we have the following data —

Petruchsky	out of 50 cases	found it in	3
Horton Smith	12	"	2
Blumer	10	"	0
	72		5

(Richardson does not refer to the point in his paper)

Thus out of 72 cases examined this condition has been present in five, giving a percentage of seven for all cases of typhoid fever, or if we assume that it never occurred in any of Richardson's 39 cases (since he does not refer to the matter at all) we get a total of 111 cases examined with five positive results, giving a percentage of 4 5 It is probable, therefore, that we shall not be far wrong if we assume that this very serious complication occurs in about 5 per cent of all typhoid cases

3 *Date of the first appearance of the bacilli*—In nine of the 15 positive cases recorded above the date of the first appearance of the bacilli was determined with accuracy This occurred on the fifteenth day (twice), on the twenty fourth thirty second, thirty sixth, and thirty ninth days (once each), and also on the fifth, sixth, and tenth days of the disease after final defervescence—that is to say, it always first occurs late in the disease and has not as yet been observed earlier than the fifteenth day

4 *Duration of the phenomenon.*—With regard to the length of time during which the bacilli may persist in the urine if no treatment be adopted and if the patient survive we have the following facts Of 10 such cases recorded the duration of the bacilluria has been in each respectively—8 days, 21 days, 25 days, 30 days, 70 days, and + 13 days, + 18 days, + 19 days, + 34 days, and + 40 days (the + in the latter five cases signifying that the patients still continued to excrete bacilli when the observations were discontinued) It may therefore be said that while the duration may vary within somewhat wide limits, the excretion of the bacilli usually lasts for some considerable time, extending often far into convalescence Indeed, so prolonged may the condition be that several of the patients have actually been discharged from the hospital still exhibiting the phenomenon Very rarely also the condition may apparently persist for months or even years [27]

5 *The character of the urine*—It might reasonably be expected that when the typhoid bacilli occur in the urine this excretion would be altered in some definite and uniform manner and that thereby our attention would be drawn to this dangerous condition Unfortunately this is not the case—apart, that is to say, from that occasional general turbidity referred to above which, if not due to phosphates, should always lead to a microscopic, and

[26] Johns Hopkins Hospital Reports, 1895.

[27] Houston: Br Med. Jo J January 1899

if necessary to a bacteriological, examination Thus in Richardson's nine positive cases (*a*) eight showed "a faint trace or a trace of albumin," one only from a "thick cloud up to one-eighth albumin," but, as he himself shows, of his 29 negative cases 15 contained albumin and on an average more than was found in those cases which contained bacilli So also as regards the presence of casts Again, (*b*) in two of my cases, while very numerous bacilli were present, the urine was clear and contained no albumin So also in one of Petruchsky's cases Sometimes, also, (*c*) pus has been present in the urine with the bacilli (Blumer, two cases, so also in the case recorded in this paper)

It is evident therefore that the urine presents no constant characteristics in these cases Most frequently it would seem to contain a trace of albumin, but it may contain a good deal, it may contain pus Sometimes also it may be absolutely natural

6 *The clinical course of these cases*—It will be instructive to inquire whether the typhoid cases in which the bacilli are found in the urine run a more severe course than those in which this phenomenon does not occur Richardson is of opinion that such is the case, and certainly of the 15 cases mentioned above five died (a mortality of 33 per cent), while of the 45 in which typhoid bacilli were not present in the urine only two died (or 4 4 per cent) It is very questionable, however, whether these figures accurately represent the state of the case Certain it is that in the five cases in which the urine was "turbid" from the millions of bacilli present recovery took place in each Moreover, in four of them the phenomenon occurred during convalescence, and throughout its whole duration the patients seem to have suffered from no bad symptom whatever This certainly was the case in the patient whom I had the opportunity of watching myself During the occurrence of the bacilluria he was rapidly getting well and complained of absolutely nothing It would seem, therefore, that the prognosis in a given case should be unaffected by the occurrence of the bacilli in the urine.

7 *On what does the condition depend?*—Unfortunately at present no definite answer can be given to this question owing to the lack as yet of post-mortem examinations in suitable cases On the whole it would seem most probable that the condition is due to local changes set up in the kidney by the growth there of the typhoid bacillus, an occasional microbe having been carried thither by the blood stream It is, without doubt, *not* due to a mere filtration of typhoid bacilli out of the blood The matter, however, requires further investigation

General conclusions—The conclusions, then, which we are justified in arriving at with regard to the infectious character of the urine in typhoid fever are as follows 1 It can no longer be doubted that typhoid bacilli occur in the urine of typhoid patients, probably in about 25 per cent of all cases 2 For the most part, though present in such numbers as to be demonstrated bacteriologically with the greatest ease, they are not present in sufficient quantity to alter the naked eye appearance of the urine In a smaller proportion of cases, however—probably about 5 per cent of all typhoid cases—the urine is rendered turbid by their presence They are nearly always in pure culture 3 They occur first late in the disease, rarely if ever before the third week, and may make their first appearance during convalescence. 4 They generally remain present for some considerable time, for some weeks or even months 5 The character of the urine does not assist in diagnosing the condition (unless of course it be rendered turbid by the bacilli) It may contain no albumin, often contains but a trace sometimes has a good deal, and sometimes has pus, all of which conditions occur quite apart from the presence of typhoid bacilli in the urine 6 The prognosis of a case is not rendered more grave by the occurrence of this condition

Finally, it may be well to contrast the infectious character of the fæces with that possessed by the urine, for in many points the two are dissimilar In the first place, it must be noticed that whereas the fæces contain the typhoid bacilli in apparently every case this does not obtain with the urine. Probably, indeed, in not more than 25 per cent of all typhoid cases does the urine present this phenomenon Secondly, typhoid stools are without doubt most dangerous early in the disease—within the first three weeks The typhoid urine, however, only becomes dangerous towards the end Thirdly typhoid stools may contain considerable quantities of typhoid bacilli but very rarely if ever, do they contain such myriads as may be present in the urine

In conclusion, we may ask which excretion must be regarded as the most dangerous and chiefly responsible for spreading the disease It would seem on the whole that the palm must be given to the urine and this partly on account of the enormous numbers of bacilli which may occur in it and partly on account of the nature of the excretion itself Thus, the stools by their colour and odour at once attract attention, so that the slightest soiling of the linen is at once noticed and the damage rectified, but the same cannot be said of the urine A minute drop from a suitable case may contain some 6000 bacilli—adhering to the end of the penis or to the vulva after micturition, it would infect the linen and could not but escape detection It is probable, indeed, that in such cases we have the explanation of the fact that even after all precautions have been taken those attending on typhoid patients not so very rarely catch the disease It would seem, in fact, at the present moment that this occurrence must be sometimes unavoidable [28] Indeed, when we come to think of the matter it is really astonishing, considering the opportunities of infection which undoubtedly exist, that these cases do not occur more often It is a strong argument in support of the view that some other conditions must pre-exist, possibly in connexion with the bacterial flora of the alimentary canal, without which typhoid fever will not occur even should the typhoid bacillus be introduced

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Upper Brook street W

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[29] Journal of Experim[illegible] vol iv

ACUTE INFLAMMATION OF THE AORTA ASSOCIATED WITH PROFOUND MYOCARDIAL DISEASE

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CASES are recorded from time to time in which, with or without angina, death occurs quite suddenly and in which the necropsy reveals a condition of inflammation at the base of the aorta unusually acute in its character and remarkably localised in its distribution In these cases the aortic valves may be thickened by chronic inflammation and yet they may nevertheless be quite competent, and neither during life nor after death can aortic regurgitation be demonstrated and brought forward as an explanation of the sudden cardiac failure The area of the aorta which is so gravely and severely diseased is the one from which the coronary vessels arise, and it is a natural suggestion that the heart wall has suffered in its nutrition either from a narrowing of the lumen of one or both of these arteries, or that the vessels have shared in the same acute process, and their ramifications have become occluded as a result A reference to the literature upon this subject proves that such may be the case in some instances, but in the two cases which are recorded below I do not think that such an explanation is tenable In neither of these two cases were the orifices of the coronary vessels certainly diminished in size nor were their walls visibly diseased, and microscopic examination of the heart wall showed that their ramifications were not occluded In both cases the cardiac wall was examined with especial care and in both the changes found were widespread and severe and of a nature analogous to that found in the aorta It is difficult to escape from the conviction that there had been a common antecedent cause which had thus injured these two organs which anatomically and physiologically are so closely associated The changes in the aorta were obtrusive and in the first of the recorded cases those in the heart wall might macroscopically have been easily overlooked, yet in both cases I should suppose the sudden death depended far more upon these less obtrusive signs in the heart than they did upon the striking changes in the vessel wall The question of the etiology of this condition is one of great difficulty and it will perhaps be the most rational course to record the two cases with the necropsies and microscopy before allusion is made to their causation I am indebted to Dr Cheadle for the first case, under whose care the patient had been while in St Mary's Hospital

CASE 1 —A married woman, aged 38 years, was admitted to St Mary's Hospital under the care of Dr Cheadle on Feb 8th, 1899, suffering from pain in the region of the heart and vomiting Two months before Christmas she had first noticed occasional attacks of præcordial pain extending down the left arm which she said became blue and useless These attacks, infrequent at first, had during the last week become frequent and severe and were accompanied by vomiting and faintness Except for a severe attack of "influenza" four years before, from which she completely recovered, her health had been good She had one healthy child and there had not been any miscarriages She was said to have been addicted to alcoholism and to have been maltreated by her husband Her father was still alive, aged 78 years, and her mother died in childbirth The patient was well nourished and on admission was quite comfortable and free from pain, but shortly after reaching the ward she had a slight attack of pain in the chest and left arm with a feeling of faintness Dr Cheadle saw her during this attack and considered it to be one of true angina The next day she was quite free from pain and she then volunteered the statement that any sudden exertion, even sitting up in bed, was liable to bring on the pain The temperature was normal The pulse was of low tension with a small wave, it varied in rate considerably, but was about 72 when the clinical notes were taken At times it was excited and irregular The cardiac pulse was in the fifth space internal to the nipple line and the area of dulness was slightly increased to the left The first sound at the apex was sharp and was preceded occasionally by a short presystolic murmur The second sound was reduplicated both at the apex and the base The second sound at the base was sharp and there was no suspicion of a diastolic murmur The urine was natural, of specific gravity 1025, and there was no evidence of disease in the other organs The whole of this day and the following were passed in comfort, but at midnight on the 11th a severe anginal attack commenced. The pain radiated over the præcordial region, between the shoulders and down the left arm, and was accompanied by severe vomiting The face became deathly pale and the extremities cold and clammy The pulse was rapid and irregular and the first sound reduplicated over the whole præcordial area. The patient was in great distress and complained of vertigo and loss of vision This condition, in spite of every attempt at relief, continued with remissions and exacerbations until 3 A M when the patient died. For the account of the anginal attack and the major part of the clinical notes I am indebted to Dr Sumner, house physician, and to Dr Cheadle

The necropsy was made 32 hours after death. The pericardium was natural and the heart itself was slightly dilated. The cavities were empty and the large veins were gorged with blood There was a white patch upon the right ventricle and the cardiac muscle was pale and pink in colour The aortic valves were distinctly thickened but quite competent. The pulmonary valves were natural The mitral valve was affected by a chronic valvulitis which had slightly narrowed the orifice The posterior flap had been most affected and the chordæ tendineæ in one part were so shortened that at this spot the valve was tethered on to the papillary muscle In the substance of the valve there was a calcareous nodule. The tricuspid orifice and valve were natural Neither ventricle was hypertrophied The left auricle was slightly thickened The commencement of the aorta for the first two inches was extensively diseased and this condition extended in irregular patches along the arch The intima of the vessel in this situation was raised from the general surface and was pinkish red in colour, where the disease was most acute Some of these raised patches had a translucent appearance, others were yellow with a red flush around their bases A few patches resembled the ordinary condition of atheroma The appearance was that of an acute aortitis supervening upon a more chronic inflammation The large vessels springing from the aorta were not affected The orifice of the right coronary artery appeared narrower than usual, but it admitted a large probe easily, and the walls of both vessels were macroscopically healthy The other large arteries were not diseased There were peritoneal adhesions the result of a previous inflammation between the left lobe of the liver and the spleen, and in the midst of these adhesions there was a calcareous nodule of the size of a large marble Except for this peritonitis there was no evidence in the other viscera of lesions which might have been explained by syphilis. The bones were only examined by palpation, but no results of a localised chronic inflammation were detected in any of them The kidneys macroscopically and microscopically were healthy

Microscopy of the aorta and cardiac muscle —The sections of the aorta were made from tissue fixed in corrosive sublimate and embedded in paraffin The intima was swollen and the vessels were distended Around the vessels there was a free exudation of cells and the fibrous tissues were swollen In places the cell exudate reached the surface of the intima The elastic coat was also freely infiltrated with leucocytes which extended to some depth into its substance Where the aorta merged into the heart wall itself the exudation could be traced beneath the endocardium of the left ventricle

The cardiac wall —Both the left and the right ventricle were examined, the former in three different places and the latter in two Some of the material was fixed in sublimate and some in Hermann's fluid. All the sections were cut in paraffin Extensive changes were found in both ventricles which, speaking generally, consisted of scattered foci of advanced disease surrounded by areas comparatively unaffected The morbid changes are considered under the following headings (1) the nuclear changes, (2) the changes in the muscle protoplasm, (3) the changes in the interstitial tissues, and (4) the changes in the vessels

1 *Changes in the nuclei* —The nuclei stained with carbolthionin took the dye but feebly as compared with the muscle protoplasm, which was coloured a deep blue, whereas in

althy muscle the nuclei stain a deep violet and the protoplasm a faint blue This condition I have noticed in other cases of sudden death—for example, in a case of gastric ulcer in a young woman in which the necropsy disclosed no definite explanation, in a case of dilated heart of obscure origin, and in a case of acute septicæmia Sections fixed in Hermann's fluid and specially stained with nuclear stains showed the nuclei to be in many fibres almost colourless, and a decolourising method was used they rapidly lost the stain instead of retaining it tenaciously This condition was most obvious in the neighbourhood and within the foci of marked disease Stained with methyl green the nuclei also showed this reeble staining reaction

2 *The muscle protoplasm* had in many places completely lost striation, in other parts this was still evident In addition there was marked longitudinal striation, a fraying of the ends of the muscles, and in some places frequent transverse fracture Where the disease was advanced many dark granules were obvious around the nuclei and in some fibres this change was so extensive that only a shell of muscle fibre and a faint nucleus could be seen. In other parts the muscle had a homogeneous hyaline appearance The osmic acid preparations showed fatty changes in some fibres and in those which were most diseased this was extensive If treated with very dilute acid the yellow granules and black fat globules were apparent in the same fibre

3 *The interstitial tissue* showed some increase, but this was not striking Where disease was most advanced the increase in the interstitial elements was more apparent than real, being due to the complete destruction of the muscular fibres, leaving the connective tissue framework more than usually apparent In some places there was a cellular infiltration between the muscle fibres and an appearance of active reaction

4 The large vessels showed in some of the sections a considerable increase in the thickness of the outer coat, but there was not an endarteritis No occluded vessels were detected in a number of sections which were examined especially for them The capillaries in some of the diseased areas were distended with blood and were much more obvious than usual The disease was irregularly distributed in all parts of the ventricle with no particular relation to the pericardium though some of the foci reached the surface No organisms were detected in the aorta or the cardiac wall

CASE 2 —A man, aged 63 years, was brought to St Mary's Hospital on Nov 10th, 1898 No account could be obtained of his previous health or habits The circumstances of his death were the following He was sitting at a table in a shop at 2 30 P M shortly after dinner when while speaking to his fellow workmen he suddenly got up from the table and fell to the ground. He was then found to be unconscious and lay in this condition, breathing heavily for 10 minutes He was placed in a cab but died before reaching the hospital

The post-mortem examination was made 24 hours after death Rigor mortis was present, there was much abdominal and a considerable amount of epicardial fat. The heart weighed 18 ounces Both ventricles were dilated and the left was slightly hypertrophied The endocardium in the left ventricle was opaque and thickened. The aortic valve was competent and the segments were distinctly thickened The mitral flaps were thickened, the other valves were natural The cardiac muscle especially in the interventricular septum and toward the apex of the left ventricle, was obviously fibrosed The commencement of the aorta showed an extensive inflammation of the inner coat It was red and showed also raised translucent patches and yellow areas, the latter older in date and less acute in their origin than the former The orifices of the coronary arteries were natural in size and there was no visible disease in their walls The kidneys microscopically showed some fibrosis and the vessels were distended with blood. There were no evidences of visceral syphilis in the other organs

Microscopy of the aorta —The intima was increased in thickness and the vessels were distended. There was extensive cellular exudation both reaching the inner surface of the vessel and extending into the elastic coat

The cardiac muscle was extensively diseased in scattered areas Some of the fibres showed striation but many had lost all vestige and there was some fatty change and many granules around the nuclei of these fibres The interstitial changes were very extreme in some parts of the interventricular septum The muscle had almost completely disappeared and the outer coats of the vessels were thickened The smaller vessels in places were distended and there was exudation of leucocytes, pointing to an active process

There is a striking similarity between these two cases and one which would in all probability have been even greater had any previous history of the second case been obtainable Both died rapidly but not abruptly and in both acute changes were found at the commencement of the aorta, with marked focal changes in the cardiac walls, and these latter in the absence of definite disease of the coronary vessels In neither case was the pericardium affected In both there was some thickening of the mitral and aortic valves, but in neither were the aortic valves incompetent In the man the heart was considerably enlarged, but it must be borne in mind that he was 63 years of age and that his kidneys showed some cirrhosis That the etiology of such cases as these is obscure can be readily understood when there is so little that is definite to be gathered from their history The condition of the heart and aorta goes far to explain the symptoms but helps but little to explain the causation

The microscopic evidences of dilated vessels, exudation of leucocytes, and increase of fibrous tissues point to a reaction to some morbid process, and the activity of it is manifested in the destruction of the muscular fibres and altered condition of the intima of the artery Morbid processes of many different kinds may, however, produce a like reaction to that presented in these cases and the remarkable feature lies not so much in this as in the peculiar distribution of the disease In the case of the woman I examined all the larger arteries with especial care and saw no trace of a condition similar to that found in the aorta The literature upon the subject is to some extent unsatisfactory, for the condition of aortitis is in many instances considered apart from that of myocarditis and *vice versa* In some cases the changes in the cardiac wall are undoubtedly due to disease of the coronary vessels, while of a case recorded by Dr G W Balfour (an illustration of which forms a frontispiece to his 'Clinical Lectures on Diseases of the Heart and Aorta") it is stated that the heart was almost healthy, though there were some narrowing of the coronaries and interference with the circulation French authors have written with great care and minuteness upon the subject of aortitis, both clinically and experimentally, and it is well recognised that such a condition may occur as *secondary* to an acute infection, as in typhoid fever, variola, or influenza, or may apparently be *primary* In these two cases it is not, I think, a question of a primary or secondary aortitis which has to be considered but a joint affection of the heart and artery dependent upon some common cause A combination such as this was observed by Landouzy and Scredery in hæmorrhagic small pox and typhoid fever, though the inflammation was more acute and in the arteries far more extensive. In infective endocarditis the aorta and cardiac wall may be both extensively diseased Boinet and Romany have produced aortitis in animals by injecting diphtheria toxins under the skin and Mollet and Regaud and other observers have produced myocardial disease by the same methods There is then evidence of this combination occurring as a result of infections, the disease in the heart and arteries not being dependent the one upon the other but both attributes of the particular infection.

In these cases there was not any evidence of an acute infection and the appearance of the vessels pointed to a condition of acute disease supervening upon a more chronic process, which would appear to be the rule in the case of acute *primary* aortitis One would therefore naturally turn for the explanation to some chronic toxæmia in which there are exacerbations of intensity, and syphilis is perhaps the most readily brought to mind This disease is known to affect the arteries but especially the smaller ones, and also the myocardium In 1856 Sir (then Dr) Samuel Wilks described extensive fibroid changes in the heart as a result of syphilis, and in 1897 Dr Sidney Phillips[1] published an important paper upon the same subject Unfortunately, there is no account of the aorta except incidentally, the paper dealing solely with the changes in the heart itself In the case of the woman recorded in this article the chronic inflammation between the left lobe of the liver and spleen with the calcareous nodule enclosed therein is very suggestive of such a cause, but further evidence there was none The condition of the cardiac wall in both cases would be compatible with syphilitic disease, but, as already stated in the absence of a definite gummatous change it

[1] Syphilitic Disease of the Heart Wall, THE LANCET Jan. 23rd, 1897

condition continued for the next four months She had never menstruated regularly and for some time before and since her admission she had suffered from complete amenorrhœa. It was noticed that at certain periods (occurring about every four weeks) she became worse mentally, being more than usually dirty and depraved in her habits At the request of her relatives she was examined, under an anæsthetic, by a well known gynæcologist who could find no mechanical obstruction to her menstruation With a view to bringing about this function (and without in any way attempting to treat her mental condition) he suggested that she should be given ovarian tabloids This was done, the patient taking five grains of ovarian extract three times a day She was not confined to bed and the treatment was continued for some weeks, during which time she showed marked signs of mental improvement, becoming much cleaner in her habits, more tidy in her appearance, taking more interest in her surroundings, and answering simple questions in a more rational manner She also began to occupy herself in sewing and in household duties About a month after this treatment was commenced she menstruated slightly Her relatives were very anxious to have her at home and at the end of June, 1898, she was sent out on trial and some months later was finally discharged as relieved. A few weeks ago I received a letter from her sister, who says "I am glad to say my sister is in very good health, both mentally and bodily Her periods have been regular I feel now that I can trust her to go about alone She travelled from London to Birmingham some time back by herself She has taken up her music again and rides her cycle"

CASE 2 —The patient was a young woman, 18 years of age On admission she was acutely maniacal, gesticulating, jumping about, and crying out that she was a lion She was given a mixture containing bromide of potassium, tincture of valerian, compound tincture of cardamoms, &c without much apparent benefit She continued in this excited condition for about three weeks, becoming wet and dirty in her habits and requiring constant attention She then began to gain flesh and became more demented, though still subject to attacks of hysterical excitement Six months after her admission she was put to bed and treatment by ovarian extract was tried She had suffered from complete amenorrhœa since her admission and for some time previously The physical reaction was marked On the first day her temperature in the evening rose to 101°F, although her pulse did not show an increased rate corresponding to the elevation of temperature as might have been expected She was subjected to this treatment for six days, her temperature being normal or subnormal after the first day The commencing dose was 15 grains, increasing by 15 grains daily until she was taking 60 grains 13 days after this treatment was concluded she began to menstruate and her recovery was then very rapid She is now quite well mentally and physically

CASE 3 —The patient, a young woman, 20 years of age, was on admission the subject of acute melancholia Her mother had committed suicide 16 years before. She was very low spirited and depressed, seldom speaking, and answering in monosyllables when addressed, and she appeared to take little interest in her surroundings A few weeks after her admission she became more demented wandered about in an aimless manner, refused her food, and required spoon feeding At this time she could not be induced to speak at all and did not seem to comprehend what was said to her She also became faulty in her habits She continued in this demented condition for the next two months As she had not menstruated since her admission she was then kept in bed and ovarian extract feeding was tried This was continued for seven days, the previously described doses being given. There was a marked physical reaction, chiefly affecting the pulse, her highest temperature being 99° F on the evening of the fourth day, whilst her pulse rate rose from 84 to 116 per minute The patient was very restless while undergoing treatment, difficulty being experienced in keeping her in bed She gained one pound in weight She soon began to show signs of improvement, occupying herself in household duties and answering simple questions rationally A month later she could converse but was very shy and reserved She then began to work regularly at the laundry Menstruation has now been established and she continues steadily to improve mentally so that I have good hopes of her ultimate recovery

CASE 4 —The patient, a married woman, aged 33 years, when admitted was suffering from acute melancholia with strong suicidal tendencies She had had four previous attacks, the first occurring at the age of 21 years, when she attempted to commit suicide by taking poison She was the mother of three children, the youngest being four years old For the past eight months she had only menstruated once very slightly, this occurring about two months before her admission and after a long course of treatment at a hospital for the diseases of women She continued very emotional, low spirited, and depressed for some weeks, when ovarian extract treatment was tried with the usual dose and method of administration The physical reaction in this case was not marked, the patient's temperature being normal and her pulse varying little from its usual rate The treatment was again successful in producing menstruation at the patient's next period, and also in effecting a very marked mental improvement She is now bright and cheerful and in excellent mental and bodily health She states that during a previous attack she suffered from amenorrhœa and made a quick recovery when her menses returned

CASE 5 —The last of this series of cases is that of a married woman, 43 years of age On admission she was the subject of acute melancholia with suicidal tendencies She was very low spirited and depressed, saying that she wished to get better but knew she never would, that the time seemed so long, that she wished she was dead, and that she could feel that her mind was going During the next two months she grew gradually worse and required constant supervision When admitted she was menstruating but had not done so since She, having noticed the recovery of the patient whose case was last given (Case 4), with whom she was on very friendly terms, requested that she might undergo the same treatment. This wish was complied with The physical reaction was not marked Up to the present time she shows no mental improvement and the menstrual function has not yet been re-established

I think the histories of these few cases which I have been able to place before you are sufficiently encouraging to warrant perseverance with the treatment, particularly in the insanity of adolescence, and I hope at some future time to record the results of a more extensive trial of this extract

I regret to say that in the cases of female epileptics treated by cerebrinin tabloids the results were by no means so satisfactory The treatment and dosage were the same as those followed when using ovarian extract In the first patient to whom these tabloids were administered the physical reaction was not marked, but there was some digestive disturbance The treatment was continued for 15 days, during which time she became more excited and had marked hallucinations of hearing Taking a corresponding period before and after the treatment there was a slight increase in the number of fits Three more cases similarly treated proved no more successful In the fourth case the patient had a greatly increased number of fits, subsequently becoming acutely maniacal, she had been resident in the asylum for eight years and had always been quiet orderly, and well-behaved After these unwished for results I abandoned the administration of this particular extract

No better results were obtained from the treatment of male epileptics by extract of didymin This tabloid was administered in 10 cases with the following effects Five of the patients had a fewer number of fits during the month after treatment as compared with the preceding month, but taking the total number of epileptic seizures of the 10 patients under treatment the figures become 100 to 99 Eight patients gained in weight, which was probably due to the rest in bed and the extra diet, the physical reaction not being marked, the temperature reaching 100° F in only one case The mental disturbance was very evident in nearly all these cases One patient, the subject of epileptic dementia, who had not spoken for some years and who had lived more or less in a state of hebetude became quite garrulous and observant for several weeks Others grew excited quarrelsome, and pugnacious, and laboured under hallucinations of sight and hearing to a greater extent than before treatment Cerebrinin and didymin extracts are, I believe, advertised as being on trial for the treatment of epilepsy but my observation of their effects, though very limited, would not encourage me to continue their use in this disease

Of thyroid extract I have had little experience In the few cases however, in which it was administered my results coincide with those obtained by many who have tried this treatment One patient, the subject of acute melancholia, showed a distinct improvement for some little time after treatment,

but she never thoroughly recovered and has now completely relapsed A like disappointing result was met with in a case of acute mania The other cases treated did not show even a temporary improvement

Hatton

AFTER-PROGRESS AND TREATMENT OF TWO CASES OF GASTRO-ENTEROSTOMY

BY RICHARD BEVAN, L R C P LOND, M R C S ENG, D P H

IN THE LANCET of Sept 26th, 1896, under the heading of "A Plea for Early Operation in Dilated Stomach due to Pyloric or Duodenal Obstruction" I gave the history of two cases of dilated stomach and the ultimate benefits derived from the operation of anterior gastro-enterostomy One case was that of a probably cicatrised duodenal ulcer, the other a non malignant pyloric tumour In the first a Murphy's button was used, in the other direct suture In the course of my paper, with a view to accentuate the necessity of the more early resort to operative interference, I described the sufferings and drawbacks consequent on the postponement of operative measures, and I suggested that this temporising or prolongation of medical in substitution of surgical treatment might be due either to an exaggerated view of the seriousness of an abdominal operation, or to not sufficiently grasping the serious nature of the destructive agencies at work on the organ and its glands by delay, or to anxiety to take advantage of the slightest fancied improvement (often quite temporary) obtained by lavage, dieting, anti fermentatives, and medicines, or perhaps to an unwillingness to assume the responsibility of recommending such an operation in cases where there are difficulties in the accurate diagnosis of the cause of the dilatation where there is no lump, or to recommend it at all where the presence of a lump at the pylorus makes the result unpromising Since my paper was written the fallacy of these arguments has been demonstrated by the wonderful success which has attended abdominal operations generally in the hands of competent surgeons and, amongst others, operations on the stomach itself—gastro-enterostomy most of all Again, purely malignant cases seen and recognised early and operated on quickly have not suffered half the drawbacks of the non malignant cases which were under prolonged observation and allowed to drift into the exhausted, poisoned, wasted, half-dead state before operation which is so prejudicial to the patient and operator And, lastly, it has been proved that many lumps apparently malignant have by the recovery of the patient proved to be innocent and thus have been suitable cases for operation A reader of the medical journals of to day will perceive that the hesitation of former days has changed since 1896 and perhaps in some degree gone to the other extreme, the operation being performed by Tuffier of Paris for the sake of the rest it gives to simple ulcer of the stomach, yet it must be acknowledged that the operation has had a successful career in the hands of many surgeons and its earlier adoption has lessened the risks incident to the operation, given the patient a better start on the road to recovery, and lessened his drawbacks in the years to come I pointed out in my paper that the evil results of this delay were destruction or atrophy of the digestive glands of the stomach, enormous over distension and dilatation of the stomach walls, thickening of portions of the coats by fibroid induration or degeneration of the submucous coats leading to weakened contractile power, inability to expel the contents of the stomach stagnation of food and consequential formation of a fermenting residuum with the evolution of disgusting gases, distress, discomfort, loss of sleep, and vomiting I finally pointed out that the operation gave almost immediate relief to the more urgent symptoms of obstruction, but that the other conditions would take years to overcome and remedy

It is now three and a half and three and a quarter years since the operations I have therefore thought that it might be of interest to describe the progress of these cases and the means adopted during the interval to combat and alleviate the various symptoms hoping that the hints may be of service to other practitioners in dealing with similar cases In both of my patients the operation performed was anterior gastro enterostomy Owing, however, to certain drawbacks attendant on this operation I regretted for a month at least that the posterior operation was not chosen However, I suppose each has its advantages and disadvantages—for instance, in the anterior operation with a Murphy's button the whole time consumed is about from 20 to 25 minutes, which is an important detail to a patient reduced to a skeleton and with no surplus strength, there is, again, less manipulation and the operation is easier to perform There is this disadvantage, however that when the patient is in bed after the operation and lying on his back there is a tendency for the bile to flow into the stomach, for it will be seen that the aperture of junction is situated in what in this position is the floor of the channel along which it flows This, most operators have found, disturbs digestion, fills out the stomach with irritating fluid, resulting unless removed by syphonage in vomiting This annoyance continues for months after the operation in a greater or less degree and of itself compels resource to the syphon tube It has been suggested that the bile does not flow through the operation hole but back through the disused pylorus I think this the most unlikely explanation, for the pylorus is always on the watch against reflux of food or liquid, and in the circumstances under consideration there are lessened calibre and spasmodic contraction in addition to deal with Then, again, with the anterior operation the food while the patient is recumbent has to be expelled through a trap door in the roof of the cavity with the upper wall of the gut acting as a valve flap, It is argued that this fact does not interfere with the free expulsion of the food from the stomach owing to the free contractions of the walls of the cavity, but it certainly did in one of my cases, for in the dilated condition of the stomach this very necessary contractile power is absent and the walls are acting at a mechanical disadvantage I therefore advised my patient never, if possible, to have a meal when about to retire and never to lie down immediately after a meal, the upright position and some movement helping, in my opinion, to allow of a more ready discharge of the food through the aperture Again, I used to advise my patient when in bed to help the natural expulsive efforts by turning over on to the right side almost on to his abdomen, thus allowing the gut to become the most dependent part I advised, too, his kneading and gently rubbing the stomach in the direction of the aperture into the bowel How far these manœuvres were successful and how far contractile power was returning to the wall of the stomach could only be tested by the condition of the morning wash-out to which I will allude later

Returning to the merits and demerits of the posterior operation it will be plain that in the recumbent position it allows of the speedy emptying or draining of the stomach contents into the bowel (its remaining in the stomach we know from the effect of recent operations being quite unnecessary to fulfilling the requirements of the nutrition of the body), and consequently the stomach has more rest and there is less chance of the stagnation of the food, in fact, theoretically it is the more preferable operation, but I apprehend that the drawbacks are mainly "operative"—that is, that it takes about two hours to complete, and that the operator is pretty well limited to a gastro duodenostomy instead of a gastro-jejunostomy Making a hole in the transverse mesocolon, which is highly vascular, increases the risk, besides which, dragging a portion of jejunum through it would tend to open up the risk of kinking and subsequent dangerous obstruction. This gastro-duodenostomy, then, although theoretically the more perfect operation, has the disadvantages of being lengthy and difficult, in themselves serious drawbacks, and it might not always be convenient to choose a bit of intestine so close to the stomach in certain cases, and so the anterior operation is the one most likely to be chosen by operators notwithstanding any disparagements which may be made to its adoption

Much misconception seems to exist in different cases as to the extent of the dilatation which there is both before and after operation—at least, such was the case in more than one of my cases For instance, one case was seen by three eminent consultants and pronounced slight in extent owing to having been seen early in the morning after a very slight meal, when I am sure that at certain times of the day the greater curvature almost reached the symphysis pubis This in certain cases may have a disastrous influence on an opinion as to the future treatment or on the recommendation for

operation and can only be remedied by the increased attention paid in recent years to the more accurate measurement of the extent of the affection by the employment of exploratory laparotomy, of Ebstein's gas test, or the introduction of Turck's instruments or Rosenfeld's loaded tube for inflation Accurate appreciation of the extent is, however of supreme importance to the further well being of the patient

Another symptom which I have not seen touched upon very much in the descriptions of this disease and which might mislead was well marked in one or my patients and that was attacks of what the late Sir William Roberts called "gastric cramp or paroxysmal pyrosis" This consisted of, first, a slight feeling of nausea succeeded by profuse salivation, like the aura in epilepsy, followed by violent peristaltic crampy pains in the stomach as if it was contracting forcibly and pushing something hard and indigestible over a sensitive spot or through a contracted aperture Actual vomiting in my experience never or hardly ever occurred. The saliva may be swallowed or flows from the mouth and the body is doubled up with pain and a sense of great relief follows the attack. In my patient I thought that pieces of unmasticated meat, or fruit, or vegetables, or currants were being pushed through the pylorus or over a sensitive ulcer in the duodenum. It generally occurred two or three hours after meals and most relief was afforded by bending the body and firm pressure These attacks occurred both before and after operation and though considered by Sir William Roberts to be due to a hyper acid condition of the stomach contents might be mistaken for gall-stone colic or for the pains of malignant disease and thus be misleading

Just as the syphon tube played such an important part in the health—I might even say existence—of my patients before operation and immediately after, so, too, it has continued to be used in both my cases up to about a year ago I cannot lay too much stress on the large part that this played in the after history of these cases, both in the immediate relief which it gave to sudden discomfort and in the assistance which it gave by systematic use towards permanent convalescence by removing irritative material and keeping the stomach comparatively empty and so preventing the formation of the gases which are such considerable factors in the act of dilatation I know that an idea is prevalent that the use of the syphon tube is unnecessary and weakening, but instead of that I am perfectly satisfied that in one of my cases at least, if not in both, the patient was rapidly going to the bad, although he had been operated upon till the tube was systematically employed, when he gained seven and a half pounds in weight in a fortnight. I cannot, however, be too emphatic as to the time, the kind of syphon and other details which I found useful in my cases, and this experience may be of service to others I recommend a tube of large calibre, of the softest possible rubber, German or French, but unobtainable in England It cannot possibly be too soft, as anyone who has had any personal experience can vouch for There should be a good sized hole at the side of the tube about an inch or so from the end, together with a hole at the end itself The majority of tubes are hard, not of sufficient calibre and have such a small aperture that it is quite impossible to syphon off the solid particles which often remain undigested amidst the remains of a meal. The hole gets blocked with these and the tube has to be withdrawn and cleared, often causing much distress and disturbance to the patient by re-introduction. The tube should be divided in the centre if this has not been already done by the makers and a glass junction of about two inches in length should be inserted so as to allow a view of the effluent. The upper end of the tube should be enlarged so as to admit the rounded end of a fairly large (say a pint) glass funnel. The small rubber funnels into which most of the tubes which I have seen are expanded are a nuisance as it is impossible to gauge the amount of liquid poured into the stomach at each insertion unless previously measured in a jug, and this ceremony each time is annoying and wearisome to the patient who does his own washing out. I believe it is a mistake to insert too much liquid—that is, to over-distend the stomach—each time as recommended by some authorities but I recommend about a pint of solution to be poured in at a time, the contents of the stomach having previously been syphoned off, the sides of the interior to be reached and washed by splashing the solution round the walls by alternate forcible and quick contraction and relaxation of the walls of the abdomen while the solution is in the stomach, and this manœuvre is to be repeated until the effluent is clear I believe, too, that it is a mistake to make the solution too hot I am in the habit of recommending, when the patient is stronger, a final douche of cold water or cold solution, and thus to give it a final fillip After the warm solution it acts like the cold sponge after a tepid bath, the stomach walls contract firmly and all fluid is forcibly expelled from the cavity I have usually used vaseline as a lubricant for the tube, but glycerine or simple water acts very well I do not think one can commence too early to teach a patient to pass the syphon tube for himself After a few lessons he will become the most expert and careful operator and, looking on it as his best friend, take his washing out as part of his toilet and think less of its discomfort in comparison with the relief it affords him I must in honesty confess that with some patients, especially in the early period before regaining much flesh or strength, the act of lavage caused a certain amount of shock, or, as one expressed it, "took it out of him," causing a feeling of weakness and coldness notwithstanding the feeling of relief and comfort about the stomach This was not experienced later with returning strength and appetite but I am in the habit of recommending that lavage should be done in a warm room, that the patient should lie down afterwards if necessary, and I always give some stimulant, food, or meal as soon afterwards as possible to neutralise this condition. The best times for lavage appeared to me to be the early morning on getting up, and again about 6 or 6 30 in the evening, for the following reason During the night the stomach gradually empties itself of the last meal of the previous day, this, owing partly to the recumbent position, is done very gradually and consequently there is usually at first some fermentation at night and a residuum to be found in the morning It is essential that this residuum, which contains active fermentative agents, should not be allowed to remain to inoculate the morning meal The amount of this morning residuum and the condition of the wash-out is a very fair guide as to the improving condition of the stomach When there is no residuum and the morning wash-out is quite clear for any considerable time continuously then it can be left off and a morning draught of hot water, with or without additions, to which I will allude later can be substituted, but it is wonderful how long this wash out has to be continued—years in one instance—especially when delay in the adoption of the operation led to much dilatation and lack of contractile power and indigestion. So far from being harmful, as I see it is suggested to be by one authority on stomach troubles, the experience of my patients leads me to believe that it conduces to an appetite and relish for food, lessens gastric catarrh, and abolishes to a certain degree the disgusting fermentation and eructations which are an unceasing annoyance to a patient with dilatation The stomach commences its day's work with a comparatively clean bill of health Now as to the time of the second washing out I think that 6 or 6 30 P M is about the best time Some authorities I know, have recommended it should take place the last thing at night as giving the patient an empty stomach and therefore most opportunity for sleep during the night but if it is remembered that the patient is a person whose system is impoverished and whose banking account as far as strength goes is overdrawn it will be plain that he wants to retain what food he takes as long as is possible and yet not introduce fermentative germs into the next meal Washing out at 6.30 P.M will give the patient five and a half hours after lunch to absorb what he can out of that, and he will probably enjoy his dinner at 7 o clock. If on the other hand, he delays washing out till 10 30 or 11 P M he will, with his impaired digestion at that hour, hardly have got any benefit from his last meal and that meal will have been inoculated from the residuum of his lunch and he will have to wash out the combined meals just when delayed digestion has begun to make it useful for absorption I think, therefore, after a considerable experience, that the patient derives most benefit out of his food and a fair amount of rest in addition by my plan.

With regard to the solutions of drugs to be used in lavage I have tried borax, boric acid, salicylate of soda, sulphocarbolate of soda, sulphite of soda hypo-sulphite of soda, and latterly simple boiled water Where there was active fermentation by sarcinæ and horrible eructations of sulphureted hydrogen gas very dilute solutions of hypo-sulphite of soda appeared very efficacious when, however, there was much gastric catarrh superadded to the trouble,

with secretion of ropy mucus, I recommended a weak carbonate of soda solution and I believe that it had a good effect

It may appear to be a small matter, but I am bound to lay stress upon the necessity of thoroughly cleaning the tube inside and outside on each occasion of use It should be thoroughly washed, some disinfectant solution should be passed through it, and it should be allowed to lie for a time in some Condy's or Sanitas solution after use, for I am certain that I have seen re-inoculation of sarcinæ at the next introduction into the stomach by the neglect of this precaution

Next with regard to the value of the various antiseptics, or rather anti fermentatives, which are recommended in all stages of this complaint, I must confess that my experience of their use has been most disappointing I found that to have any anti fermentative action they had to be taken in such doses as almost to become irritants and that unless taken almost before fermentation set in they were practically useless and even then they delayed or inhibited digestion I found that once decided fermentation had set in in a meal nothing short of washing out gave relief, if allowed to remain scalding, eructations, and eventually gastric catarrh and vomiting resulted I found, therefore, that it was essential in my endeavour to assist digestion to prevent catarrh, and that in order to do this an attack of fermentation had to be nipped in the bud Sometimes patients were apt to take liberties and to indulge in things which proved to be indigestible, with resulting fermentation and discomfort, then no antiseptic was of use and lavage was imperative This had to take place occasionally at irregular times, such as in the night On the other hand, I have known times when a patient has dined out, not too wisely either, fully prepared to put up with the consequences, and yet to his surprise has been none the worse for it Among the antiseptics in more frequent use I have tried creasote in pill, capsule, and palatinoid, carbolic acid, soda sulpho-carbolate, charcoal, sodic sulphite, soda salicylate, and salicylic acid This last in five grain doses in cachets appeared to be the only one upon which any reliance could be placed

With regard to diet the meals should be moderate in amount and comparatively dry, with the avoidance of anything which might form a suitable cultivation soil for germs One patient tried the drinking of hot water half an hour before meals but its effects appeared disastrous as very little of it was absorbed by the time the meal was taken Liquids should be taken at the end of the meal and be limited in quantity and some hot water should be taken at bedtime to replenish the system Milk and farinaceous puddings I found to be a ready source of fermentation, and strong tea as a drink and afternoon tea as a meal undesirable The following dietary answered very well Breakfast at 8 30 A M, to consist of fish, eggs, or tongue, toast or stale bread, butter, and some very weak China tea Lunch at 1 o'clock, to consist of either fish, fowl, sweetbread, brains, or calf's head bread or toast, biscuits and butter a tablespoonful of whisky or brandy with six ounces of plain water at the end of the meal, and no vegetables Dinner at 7 or 7 30 P M, to consist of either stewed chop or stewed pigeon, steamed fish, poached eggs, and possibly a little milky rice pudding, biscuits and butter, brandy or whisky and water as at lunch, no vegetables, and no fruit Occasionally a glass or two of madeira might be substituted for the whisky At bedtime a tumbler of boiling water was to be sipped. Shortly after the operation my patient found great benefit from an ounce of raw meat juice at 11 A M and another at 4 P M Wyeth's or Valentine's extract might be substituted, but personally I favour the home-made article, for the manufacture of which I found an old tincture press far and away the most convenient article Later, when my patient is improving, digestion is increasing, and washing out is being gradually omitted, I substitute a tumbler of boiling water at 7 30 A M containing either 15 grains of salicylate of soda or one drachm of sulphate of soda Then the dietary can be enlarged so as to allow for breakfast some toasted bacon or a poached egg or some cold boiled bacon fish (boiled or steamed), and omelette or scrambled eggs, at 11 A M a glass of port wine, at 1 P M lunch of practically the same food as above or increased by the addition of lamb, boiled or roast mutton e, baked apples, stewed rhubarb and spinach which has been passed through a sieve Dinner as above, with the addition of blanc-mange or rice with fruit jellies red currant or apple, &c, to taste In the afternoon later a little milk and a biscuit or madeira cake may be substituted for the meat-juice, but tea (afternoon tea) delays digestion and cannot be recommended At 11 P M the patient should take his boiling water Vegetables are in some forms indigestible and in others conduce to fermentation, salads, oranges, grapes and apples, and most fruits are distinctly bad, so also are milk in any quantity, sugar, and farinæ either alone or in combination—all conducing to active fermentation Experience enabled one of my patients to explode a popular fallacy—viz, that cold meat was indigestible, in fact, he came to quite the opposite conclusion, whether it was that it was drier or why I do not know Hashes and minces except of fresh meat were abominations Gravies, sauces, pickles, curries, and stews are inadmissible.

I found that digestion in this, as in other diseases of the stomach, was much influenced by exhausting work and anxiety, in fact, so much did defective innervation cause delayed digestion and all its troublesome sequels that two years ago after a period of great overwork a consultant whom one of my patients saw thought that the aperture was contracting but recommended before an exploratory operation his trying a change to Switzerland The bracing air and change acted like a charm—the gastric secretions and movements necessary for healthy digestion were restored and the patient returned to work with renewed vigour My patients did not try many drugs, they were nitro muriatic acid, hydrochloric acid phosphates, nux vomica and strychnine, bismuth alkalies and cascara I think they derived most benefit from a pill containing at first a quarter of a grain of extract of nux vomica three times a day and increased later to half a grain. To combat the constipation I tried a soap-and water enema every morning, then I substituted the soda sulphate in the hot water in the morning and later still relied on cascara. This has to be continued even now I always provided an emergency draught containing soda sulpho-carbolate, aromatic spirit of ammonia, tincture of nux vomica, and peppermint water for relieving the distress at night caused to the patient by the upward distension of the stomach against the diaphragm and heart Sitting up in bed, friction of the stomach, and a dose of this mixture in most cases quickly gave relief With regard to artificial digestives, such as pepsin (liquid and solid), papain, and lactopepsin, they appeared utterly useless One patient, however, expressed some belief in Kepler's extract of malt

To sum up the results of the operation, I think that without exaggeration it may be said that in each case the life of a patient has been saved who at this period of time could not possibly have been living without it, since then with improved nutrition the circulation has improved, fainting and toxæmia have disappeared, the earthy complexions have improved, and sound sleep has returned The Murphy's button has not been passed, but no discomfort has been experienced. With regard to the present condition of the two patients after three and a half and three and a quarter years both are well and at work In Case 2 the weight is normal and in Case 1 it is about a stone under the normal Digestion has continued to improve in both although in Case 1 (the more severe case) a little care has still to be exercised in the articles of diet, but with the other anything that comes to table does not disagree The lump, which was most probably inflammatory thickening, has disappeared In Case 1 the stomach is still dilated and splashing can be obtained, but both symptoms are improving The thirst, which perhaps was one of the most distressing symptoms of all, has disappeared with the increasing improvement in the digestive functions of the stomach By the way, this did not appear to depend upon a desire for liquid but upon irritation of the mucous membrane of the stomach and to be reflex in character, although the throat was dry and parched, it was the dryness produced by a hot pipe or cigarette Finally, I cannot better conclude than by quoting a letter which I received from one of my patients—viz "I am happy to say that to all intents and purposes I am quite well, up to my usual weight, 10 st. 7 lb, and am working up to my usual form and can eat anything I come across in reason. To-day is the anniversary of my operation I am really almost overwhelmed when I think of the wonderful change wrought in my health with my deep debt of gratitude to my God who so mercifully has aided the skill of the surgeon and practically made a new man of me again" May I express the hope that, aided by improved means of diagnosis,

y the help of confidence obtained by increased experience ıd by the reports of successful cases operators may go on ear after year giving cause for more patients to re-echo ıe sentiments of the one quoted above.

West Kensington, W

NFECTION OF TUBERCLE FROM SONG-BIRDS A FERTILE THOUGH UN-SUSPECTED SOURCE OF PHTHISIS

BY A TUCKER WISE, M D BRUX, M.R.O S ENG, L R.C P LOND, DIPLOME SUISSE FÉDÉRAL

WHILST engaged on an inquiry into the sources of ıacillary infection in cases which have recently come under ny notice I have been struck by the number of patients who ıave lived in contact with diseased canaries and other ;eathered pets Among cage-birds, pigeons, and poultry ;uberculosis is a common disease and there is a strong probability that avian infection can be conveyed to human beings who keep birds within the house The objectionable practice of allowing them to place their beaks in contact with the lips is a risky and dangerous proceeding as regards liability to receive bacilli in this way if the bird is not healthy Flies can also convey filth and with it disease germs from the cage to human food, or the dust of dried excrement and mucus may pollute the air of any room in which birds are kept Feeding and nursing sick birds and blowing the dust and husks from their seed and cleaning the cage are not without danger In my opinion the canary or any other bird kept in the kitchen is a positive peril to the household, as by fluttering and whisking the dust from its cage or mucus from its beak the food of a whole family can be contaminated

Parrots also can be attacked by tubercle, which is characterised frequently by new growths of horny skin which sometimes attain a considerable size They can be easily broken off and they contain numerous tubercle bacilli in their basal granulation tissue Tuberculosis of the lungs and conjunctiva is often met with According to a compilation by Eberlein the skin was affected in 52 per cent., the tongue in 16 per cent, and the bones and articulations in 12 per cent. of all the cases. From a diagnostic point of view it is important to note that the tuberculosis of parrots is distinguished by the presence of an enormous number of bacilli [1] Psittacosis, an infectious disease of parrots, has already been observed to cause a serious and fatal pneumonia of a special type transmitted from these birds to man In 1892 about 50 persons in Paris were attacked, since that time other milder epidemics have been noticed and studied by Gilbert, Fournier and Débove At the same time Nocard was fortunate enough to isolate a short, thick bacillus with rounded ends and he gave a description of it before the Conseil d Hygiène in 1893 Cadiot[2] contributed a paper on tuberculosis of the smaller animals and pointed out that dogs and cats were much more liable to tubercle than was generally supposed Tuberculous dogs spread infection by nasal discharge, by excrement by urine, and by lesions of the skin cats equally in the same manner One of the cats examined had a large ulcerated wound of the nose Cadiot also noticed external tuberculous lesions as being frequent among parrots

Taking into consideration the unnatural and unhealthy life to which man subjects the domestic animals, especially birds confined in small cages it is not surprising that these captives should become diseased and pollute the air with pathogenic micro-organisms In a work on diseases of cage birds Dr W T Greene mentions phthisis as a form of tuberculosis attacking the lungs which is not usually met with in birds except as a sequel to the occurrence of the disease in other parts of the body, notably the liver and spleen, however as a secondary affection it is not uncommon amongst canaries He names the symptoms as gradual emaciation, sometimes a husky cough inability to moult and lastly diarrhœa, and adds that canaries are the most frequent victims, but that fowls, pheasants, and pigeons also suffer from the disease Bechstein defines a disease of cage birds called the "pip" as a catarrh or cold by which the nostrils are stopped up and the membrane covering the tongue is hardened by inflammation No bacteriological observations have yet been made on this catarrhal disease so far as I know, nor can anyone say whether it is contagious or the reverse There are also forms of tuberculous tendency in cage birds termed "rickets" and "scrofula." In mentioning the latter Dr Greene says that it is strongly hereditary, and knowing this the amateur for his own sake should avoid breeding from a tainted stock, which may endure for years, it is true, but will always be unhealthy and unsightly Gilbert, Roger, and Cadiot have been able to produce tuberculosis in rabbits by inoculating them with the avian bacillus We must therefore admit that avian tuberculosis may occasionally be transmitted to mammals [3] Much incipient unnoticed disease exists amongst domestic animals and bacillary affections enter largely into the mortality of cage birds From a clinical inquiry I find some remarkable coincidences of pulmonary tuberculosis developing in families who have kept birds in the house, and I am of opinion that a number of healthy sound individuals contract the disease from this origin An instance of suspected infection arising from poultry where the diseased fowls were consumed as food is given by Dr Peter Paterson in THE LANCET of Oct 30th, 1897 In this case, although the diseased fowls had no access to the dwelling house, Dr Paterson considered that the infection of the family with tuberculous disease (the wife dying ultimately from intestinal and the daughter from pulmonary tuberculosis) was derived either indirectly by inhaling or swallowing the germs as they were blown about in the poultry house, or more directly by eating the carcasses of the birds which may have been insufficiently cooked. From my own personal investigations, already referred to, I will now relate the following examples of infection from canaries and other small cage-birds occurring amongst some of my patients and in their households

CASE 1 —This case occurred in a large, well built house situated in one of the health resorts The family health was good. There was no hereditary tendency to tuberculosis either in the parents or grandparents About from 20 to 30 small birds, chiefly canaries, were kept for many years in rooms over the stables, distant about 50 feet from the house Many of these birds were brought into the house from time to time and cages were always hanging in the dining room and hall In the kitchen a cage hung over the table on which were placed the pastry, cakes, jellies, ices, &c for meals In 1887 a domestic servant, aged 23 years always delicate, developed cough with hæmoptysis. In 1889 a domestic servant aged 22 years, became ill with cough and expectoration In 1890 a domestic servant, aged 24 years, developed cough with hæmoptysis In 1890 a daughter in the family aged 30 years, well developed and enjoying good health, whose weight was 9 st 7 lb, and who was fond of out door exercise, was taken ill with hæmoptysis Caseation of the apex of the left lung supervened and a cavity formed which had now cicatrised (1899) In 1892 a son in the family, aged 21 years, always healthy, whose weight was 11 st. and whose height was 5 ft 10 in, was taken ill with hæmoptysis and loss of flesh accompanied with signs of consolidation at the apex of the right lung After two winters' treatment in the Alps no physical signs of disease remained In 1893 a son in the family, aged 27 years, athletic strongly built, and healthy was taken with hæmoptysis, cough, and loss of flesh. Rapid and extensive tuberculous infiltration of the lungs supervened and he died in 1895 This patient kept birds in his bedroom. In 1893 a domestic servant, aged 25 years, was taken ill with cough and expectoration followed by hæmoptysis In 1896 a daughter in the family, aged 35 years, had hæmoptysis and caseation of the apex of the left lung with formation of cavity She is still under treatment.

CASE 2.—This case occurred in a house situated in a large town The patient, a man, aged 41 years who had always been in good health and with no family history of tubercle, suddenly broke down with cough, expectoration, and loss of flesh He regained a loss of 20 lb in weight during one winter in the Alps A cavity which formed in the right apex cicatrised after three years' treatment and the patient now

[1] Friedberger and Fröhner's Veterinary Pathology Translated by M. H. Hayes, F R.C V S. 1892.

[2] Academie de Medecine November 1896.

[3] Brit. Med. Jour., March 5th 1892.

enjoys good health He kept a canary which died before he broke down in health

CASE 3 —This patient was a medical man, aged 31 years, practising in a health resort He was a well built, athletic man and had always been in the enjoyment of good health There was no family history of tubercle Illness commenced with hæmoptysis during influenza There was dulness at the apex of one lung with a few fine crepitations and expectoration containing half a-dozen tubercle bacilli in a field There was loss of weight to the extent of 21 lb This patient recovered completely after one winter in the Alps He weighs now 13 st His height is 5 ft 9 in He writes "We had two birds and strange to say they both died about the time of my illness"

CASE 4 —The patient was a dental surgeon, aged 43 years There was no family history of tubercle He was well nourished and was in good health up to two years ago His weight then was 13 st and his height was 5 ft 11 in After a small hæmoptysis cough and expectoration supervened with bacilli in the sputum Canaries were kept in the house but none died, nor did any of the birds appear to be diseased This patient is still under treatment

CASE 5 —The patient was a woman, aged 20 years She lived in a healthy part of Queensland, Australia She was taken ill with cough, feverishness, expectoration, and emaciation Râles were detected throughout both lungs, but very few bacilli were observed There was no family history of tubercle either in the parents or grandparents From 15 to 20 canaries were kept in an aviary on the balcony of the house, several of these birds died from time to time A brother had died from phthisis, aged 25 years Another brother, aged 23 years, and a sister, aged 20 years, had died from phthisis The patient named above died after one year's illness All these persons had been in contact with the birds for some years

CASE 6 —A family living in a healthy situation in Silesia kept a large number of birds in an aviary fitted with artificial trees, water, &c, in the conservatory There was no hereditary taint of tubercle with the grandparents who died at advanced ages—viz the maternal grandmother, aged 89 years, from heart disease, the maternal grandfather, aged 70 years, from gout, the paternal grandmother, aged 75 years, and the paternal grandfather, aged 75 or 80 years, from disease not known but it was not lung disease The family inhabiting the house died as follows the mother, aged 61 years, from pulmonary consumption of three years' duration, the father, aged 57 years, from pulmonary consumption of six months' duration Nine sons and daughters also died from phthisis at the following ages 12 years, 14 years, 16 years, 17 years, 19 years, 24 years, 30 years, 36 years, and 37 years Two daughters remain alive, aged about 50 and 60 years, both are affected with pulmonary tubercle in the quiescent condition

CASE 7 —The patient was a youth, aged 18 years He had had hæmoptysis yearly since 12 years of age A cavity had formed in the right apex Several canaries were kept in the house previously to the first hæmoptysis During the holidays he would have the birds in his bedroom They were considered to be "unlucky" in bird keeping as so many died

CASE 8 —The patient was a woman aged 33 years Illness commenced with cough, expectoration, and loss of flesh about two years ago There was now excavation at the apex of the right lung There was no family history of tubercle and the patient occupied a spacious house in a healthy situation in London She frequently visited a house where canaries were kept in the bedroom, dining room, hall, and kitchen The smell of the cages often made her feel sick There were two members in the family she visited—husband and wife—but no children The husband mentioned developed pulmonary disease at the age of 40 or 45 years, although he was considered a strong man and had been an athlete at Oxford

CASE 9 —A woman, aged 22 years, was taken ill in June, 1892, with a cough, Hæmoptysis occurred in 1893 There was no loss of flesh, feverishness, or shortness of breath A winter spent in Egypt did not prove beneficial She preferred cold climates A cavity formed in the right apex without much constitutional disturbance A linnet and a canary were kept in the house before her illness, she frequently kissed the birds [illegible] of which died from a wasting disease

CA[illegible] oman, aged 41 years She had [illegible] r two or three years In 189[illegible] and feverish symptoms supervened She lost a little weight in the summer, but regained the loss during the cool weather of the autumn. There was scattered tuberculous mischief in the upper portions of both lungs, but with patience and care the disease has become comparatively quiescent A canary was kept in the dressing room for four or five years. The bird died

As there is generally a high mortality amongst cage-birds, especially if several are kept together, and tuberculosis being very frequent with them, the birds which become affected can doubtless spread bacilli during the course of the disease. It appears therefore inevitable that any person inhaling the contaminated dust of the house runs a decided risk of becoming infected by a respiratory impurity of a virulent nature On the other hand, tuberculous dust can be deposited on the food of a household, especially on milk, butter, cheese, bread, jellies, pastry, and all cold viands, and in this way convey the avian bacillus to the stomach and intestines Perhaps the relation of the foregoing cases in which over 30 persons became attacked by tubercle may tend to elicit further information from other observers on the important question of tuberculous infection from avian sources There have been cases already observed where the avian race have themselves become infected from human sources—e g, in the case of poultry picking up tuberculous expectoration or eating food previously masticated by tuberculous human beings It is stated that parrots have taken the disease in this manner and also by the bird inhaling the bacilli of human sputum along with dust deposited in dwelling rooms, mentioned by Friedberger and Fröhner, Hayes, and others This does not, however, affect the question of the avian race being capable of re transmitting the infection in their turn if kept in a diseased condition in contact with human beings Although doubts have been expressed regarding the identity of avian tuberculosis with that of mammals, Friedberger and Fröhner mention that the more recent investigations of Cadiot, Gilbert, Roger, Fischl, Courmont, and others tend to show that these two forms of tuberculosis are produced by the same species of bacilli, although by different varieties, the differences between them having been produced by differences in their respective modes of nutrition The number of song birds kept in captivity, especially canaries, must be very large. It is stated by a recent writer in *Good Words*, under the *nom de plume* of "Nightingale," that at a moderate estimate 400,000 canaries are sold every year in Great Britain

Montreux, Switzerland.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

NOTE ON HERNIA OF THE VERMIFORM APPENDIX.

BY W MCADAM ECCLES, M S LOND, F R C S ENG,
ASSISTANT SURGEON TO THE CITY OF LONDON TRUSS SOCIETY AND TO THE WEST LONDON HOSPITAL, AND DEMONSTRATOR OF OPERATIVE SURGERY AT ST BARTHOLOMEW'S HOSPITAL.

IN THE LANCET of May 6th, 1899, two very interesting instances of the vermiform appendix being the sole occupant of a femoral hernial sac are recorded—one having been under the care of Mr Edmund Owen and the other under the care of Mr W H Battle One of the most interesting points raised by these cases is the question whether true strangulation of an appendix in a hernial sac ever occurs. By strangulation I would imply the sudden descent of the viscus through a hernial aperture and the immediate nipping of its tissues by the edges of the ring, so that there results an obstruction to the proper return of blood from its vessels That such may occasionally happen may be true and that it may be in evidence without signs of intestinal obstruction is obvious, for the lumen of the cæcal appendage is not in the direct line of the onward flow of the intestinal contents. But I venture to think that in a large majority of cases where untoward symptoms occur when an appendix is herniated, these are due to inflammatory processes precisely

similar to those which may affect the appendix while still within the abdominal cavity It is well known that the symptoms of appendicitis may supervene with surprising rapidity, and this fact applied to inflammation within a hernial sac would perhaps lead to the belief that sudden strangulation had occurred In many cases where an appendix has been found in a hernial sac, apart from other viscera, adhesions have been noted, showing evidence of past inflammatory action even if this has been but slight Again, concretions and foreign bodies within the appendix have been recorded when this organ has been found outside the abdomen No doubt when inflammation is in evidence the appendix becomes greatly thickened and its tissues will thereby be considerably pressed upon by the fibrous structures around the neck of the sac, but this is a secondary effect and should not be designated primary strangulation The appendix has been found alone in the sac of a right inguinal, a right femoral and a *left* inguinal hernia, but I do not know of any instance where it has descended into and remained the only occupant of a left femoral, an umbilical, or a ventral hernia. It has been discovered at all ages, and out of 29 cases which I collected in 1896[1] it lay in the sac of an inguinal hernia in 16 cases and in that of a femoral hernia in 13 instances

Harley-street W

NOTE ON THE COUNTING OF THE WHITE BLOOD CORPUSCLES

BY ARTHUR G PHEAR, M.D CANTAB,
ASSISTANT PHYSICIAN TO THE METROPOLITAN HOSPITAL.

IN the counting of the blood-corpuscles it is advisable, as has been pointed out by Sherrington,[2] to use a single preparation for the enumeration of both the red and the white corpuscles The blood must be diluted with some suitable fluid at least 50 times, otherwise the red corpuscles are so closely crowded that no trustworthy count can be made. In blood thus diluted the white corpuscles, if not in excess of the normal, are few and far between, over the whole area of 400 squares that are ruled on the floor of the cell in the Thoma Zeiss hæmocytometer not more than from 12 to 20 white corpuscles are to be seen in the case of normal blood, the number is so small as to afford a quite inadequate basis for the calculation of the total number of white corpuscles in the cubic millimetre of blood The object of this note is to indicate a simple means of increasing the area available for the purpose of the count. It is by the use of the camera lucida The most convenient form is the Zeiss-Abbe drawing camera, which is used with the stage of the microscope in a horizontal position—an important matter in dealing with fluid preparations, the image of the field is projected on to a piece of paper or cardboard lying horizontally on the table immediately to the right of the microscope stand Before making the blood-count the ruled squares on the floor of the hæmocytometer cell are brought into focus and with the aid of the drawing camera the outline of as many squares as appear in the field is accurately marked out on the cardboard At the time of making the count the image of the corpuscles which lie on the unruled part of the cell floor is thrown by means of the camera on to the cardboard and the corpuscles which appear to lie over each square are enumerated and included in the count. In practice it is convenient to use a mechanical stage, and with the help of this it is possible to map out with great accuracy as much of the floor of the cell as is occupied by the drop of diluted blood and to enumerate the white corpuscles lying thereon. In this way the number of white corpuscles which are brought under notice for the purpose of the count is multiplied many times It is, of course essential that the eye-piece objective, and tube-length used during the count should be the same as on the occasion of marking out the squares on the cardboard For the dilution of the blood I know of no better fluid than that recommended by Sherrington,[3] consisting of distilled water, 300·0 cubic centimetres, sodium chloride, 1·2 grammes neutral potassium oxalate, 1 2 grammes, and methylene blue, 0 1 gramme In this solution the shape and colour of the red corpuscles are preserved The red corpuscles are not stained The nuclei of the white corpuscles are in every instance stained and the distinction of the white from the red corpuscles is thus facilitated. For the differential count of the white corpuscles it is desirable to work with an immersion lens and as the depth of the hæmocytometer cell renders this impossible it is necessary to prepare a special fluid film The subject of the differential count was discussed in a paper, to which I would refer, recently read by me at a meeting of the Royal Medical and Chirurgical Society[4]

Weymouth street, W

[1] St. Bartholomew's Hospital Reports 1896, vol. xxxii., p. 93-105.
[2] Proceedings of the Royal Society vol. lv
[3] Loc cit.

NOTE ON A CASE OF SYPHILIS WITH NO PRIMARY SORE

BY C F MARSHALL, M D VICT, F.R C.S ENG,
CLINICAL ASSISTANT TO THE HOSPITAL FOR DISEASES OF THE SKIN BLACKFRIARS FORMERLY RESIDENT MEDICAL OFFICER LONDON LOCK HOSPITAL, &c.

CASES of syphilis in which a primary sore is absent are well recognised by continental authorities, but most English surgeons, I believe, are still sceptical on the point The following case which was under observation from the first is therefore worth recording

On March 21st a man, aged about 25 years, was sent to me by Dr Steegmann with a view to the diagnosis of syphilis He had a roseola rash on the chest, abdomen, and flanks, but no other signs and no primary sore In January (two months before) he had contracted gonorrhœa and feared that he had also got syphilis owing to some inflamed smegma glands exciting his suspicion From that date up to the present time he was under the observation of Dr Steegmann and myself, and at no time did any "primary sore" develop Later, in March, a typical polymorphous secondary syphilide appeared followed by injection of the fauces and mucous patches on the prepuce There can, I think, be no doubt that this was a case of syphilitic infection without a primary sore

Writing on syphilis in 1897 Stassano[5] was of opinion that many cases of syphilis occur without a primary chancre and that a solution of continuity is not necessary for its formation, as shown by the occurrence of chancres on the tonsils, where such solutions of continuity could hardly occur Stassano even goes so far as to consider "primary chancres" as part of the "secondary" eruption because of the absence of any sign at the situation of the chancre during the period of incubation. Mr Hutchinson, who has been kind enough to give me his present views on this subject says "I have seen not a few cases of constitutional syphilis in which, although carefully observed, no chancre had been noticed"

Finsbury-square E.C.

[4] The Clinical Examination of the Hæmic Leucocytes delivered on April 25th, 1899
[5] La France Medicale, August 6th and 13th 1897

THE HEALTH OF GLOUCESTER.—The report of the medical officer of health (Dr Campbell) for 1898 to the Gloucester Urban Sanitary Authority has just been issued. Dr Campbell estimates the total population of the city at 41,450, an increase of 284 in the year The births numbered 1315—688 males and 627 females—compared with 1336 in the previous year The rate is 31 7 per 1000 compared with 32 6 per 1000 There were 694 deaths, as compared with 726—a rate of 16 7, as compared with 17 6 in the previous year This is regarded as an extremely gratifying fact, as it places the city on a par with the most healthy towns in the kingdom. Dealing with the water supply, the report states that the three sources of supply now available are capable of providing 20 gallons per head per day for double the population now supplied On the whole, the supply generally will, it is stated, compare favourably with that of the best supplied towns and the only fault that can be found is that the Witcombe and Robinshood Hill supplies are not sand filtered as well as decanted and that the Newent supply is not chemically softened

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv Proœmium.

LONDON HOSPITAL

TWO CASES OF FILARIASIS, ONE EXHIBITING SO CALLED VARICOSE GROIN GLANDS AND THE OTHER CHYLOUS HYDROCELE AND LYMPHATIC VARIX OF THE SPERMATIC CORDS

(Under the care of Mr FREDERIC EVE and Mr J McCARTHY, with pathological notes by Mr H L BARNARD)

THE very important observations made by Mr Barnard in the former of the following two cases throw much light on some obscure points in the life history of the filaria The fact, however, that in this case the enlargement of the inguinal glands was not due to the dilation resulting from lymphatic obstruction elsewhere does not make it impossible or even improbable that this may be the cause in other cases

CASE 1 *Enlarged and cystic groin glands on each side ("Demerara groin") due to filaria sanguinis hominis* —A negro seaman, aged 24 years, was admitted from the receiving room of the London Hospital for tumours in both groins The patient was a native of Demerara, his father being white and his mother black Some 12 years ago he fell from a tree among some broken bottles and incised his right groin, soon afterwards the swellings appeared and had slowly and steadily increased. The present appearance of the scar in the right groin would rather lead one to suppose that it originated in a suppurating bubo The tumours in the groins caused the patient no pain, only inconvenience, and their size was diminished by the recumbent position On examination it was found that the left tumour was as large as two fists and extended from the anterior superior spine of the ilium to the spine of the pubes, and from Poupart's ligament above to the apex of Scarpa's triangle below It was flattened (shaped like a bun), was lobulated, and had a pillowy feel like a lipoma The skin was freely moveable over it and the tumour moved readily on the deep fascia except at the saphenous opening where it was attached The tumour in the right groin was similar in character but was limited to Scarpa's triangle The blood was examined at night and the presence of the filarial embryos was demonstrated They began to appear about 10 P M and were most active and abundant at 2 A M It was decided to perform an operation and ether having been administered an oblique incision was made by Mr Eve over the tumour in the left groin On cutting into it chylous fluid escaped The entire mass was then dissected out and the lymphatic vessels and veins entering the mass were ligatured All stages of involvement and spongy hypertrophy of the lymph glands were found, from those glands which were not affected at all to those in which the glands had become as large as walnuts, and were composed of a tough, sponge like reticulum filled with lymph The tumour collapsed when cut into The swelling in the right groin was then treated in a similar manner To complete the history of this case the wound healed by first intention and no untoward results had occurred when the man left the hospital a month later

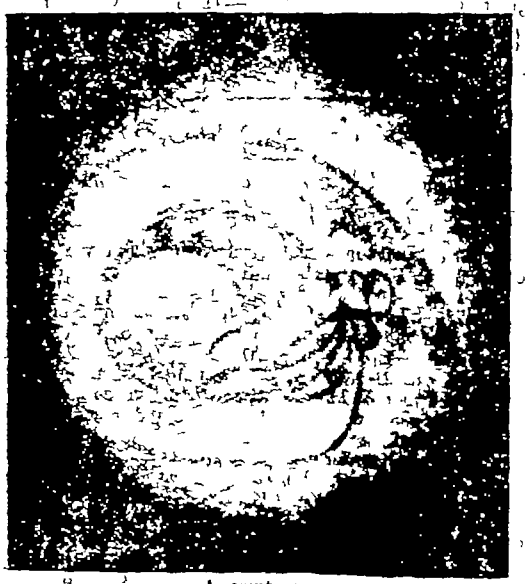
Examination of the excised glands by Mr BARNARD —The mass of glands removed was examined two and a half hours after removal by the surgical registrar (Mr Barnard) for filarial embryos These were found, but were very languid in their movements This induced him to raise the whole tumour to blood heat A parent worm was then seen to be wriggling from the cut surface of the mass This worm was unfortunately broken off at two thirds of its length, but another and complete specimen was obtained from a fresh cut surface and this worm was safely mounted in glycerine and water and ringed (Fig 1) After again warming the tumour and closely examining the points of reflected light upon its surface, it became obvious that the entire mass was in vermicular movement and it was estimated that at least a dozen parent worms were present in it It would therefore appear that the hypertrophy of the glands is to be regarded as a result of the direct obstruction and irritation of parent filarial worms living in them and not to lymph congestion due to obstruction of the lymph channels of the abdomen This observation renders it probable that the distribution of parent worms throughout the body is in some instances much more general than is commonly supposed If this assumption be correct it explains those cases in which elephantiasis of the leg and lymph scrotum co-exist and in which elephantiasis of the leg follows the removal of a lymph scrotum It also makes it more easy to understand how the union of the sexes takes place For a male worm to find a single female existing in the body presupposes a degree of instinct and perseverance which is inconceivable In the Museum of the Royal College of Surgeons of England (No 4029[1]) is a portion of a lymph scrotum exhibiting a mature female filarial worm projecting from a dilated lymphatic It was observed by Dr Manson immediately after making the incision There were no filaria in the blood although they existed in lymph from the scrotum and the groin glands were "varicose" Dr Manson concluded from this circumstance that all the lymph channels were blocked with ova and anticipated finding the parent worm in the scrotum. The parent worm in the present case (see Fig 1) was about three inches in length and resembled a piece of white thread The microscope revealed a refractive alimentary canal running the entire length of the worm. On either side of this alimentary canal were placed the two uteri The ova at the deep ends of the uteri were round cells showing no trace of the embryo worms (see Fig 2) As the uteri were traced towards their orifices the ova became more and more formed until at the opening itself free embryo worms were seen in them

CASE 2 *Chylous hydrocele of the left tunica vaginalis and lymphatic varix of both spermatic cords more marked upon the right side* —This case was admitted to the London Hospital under the care of Mr McCarthy, and Mr Eve and Mr Barnard are indebted to him for permission to publish it with the other case The patient was a young Scotchman, aged 25 years He was born in Victoria, Australia, and at the age of 16 years he entered the service of the Eastern Extension Telegraph Company In the employ of this company he visited Penang, the Straits Settlements, Batavia, Upper Burmah, and the north west parts of Australia On several occasions he suffered from malarial fever Six years before admission while in Singapore his left testis first began to swell and this he attributed to a bicycle accident Exercise often made it painful A little later he began to suffer from periodical attacks of pain in the loins followed by "milky urine," but he never saw blood in the urine These attacks were apparently due to exercise or exposure to cold. He underwent no treatment for these troubles until six months before admission, when he was in Australia, and a medical man informed him that he had a hydrocele and tapped it. A teacupful of "yellow, cloudy fluid, rather thick in consistency," was drawn off The patient had recently come to England and as his hydrocele had recurred and a soft swelling had appeared on either side of his scrotum he applied at the London Hospital for treatment On examination it was found that in the left side of the scrotum there was a hydrocele of about the size of a turkey's egg It fluctuated and was translucent On the right side above the testicle was a swelling of the size of a bantam's egg which was soft and felt like a varicocele, it emptied on steady pressure and slowly filled again Upon the left side a similar condition existed in a minor degree The patient was very sallow and anæmic Filarial embryos were found in the patient's blood at night They were absent from the vessels of the skin during the day and began to appear at from 10 to 12 P M Mr McCarthy tapped the hydrocele and drew from it four ounces of chylous fluid He then injected a drachm of iodine solution On examining the chylous fluid active filarial embryos were demonstrated A fortnight later Mr Eve (to whom the case had been transferred) dissected out the lymphatic varix in the right spermatic

[1] See Museum Catalogue vol. xxxii., p. 285.

ord, treating it as though it were a varicocele It consisted of dilated and hypertrophied lymphatic vessels with thickened walls These vessels were held together by loose connective tissue On dividing them a milky fluid escaped which contained the embryos in active movement For a few days after the operation the scrotum was distended with an effusion of lymph and at one time it was as large as a

FIG 1



A parent worm.

fœtal head The removal of a few stitches, however, allowed this fluid with some clot to escape and the swelling rapidly subsided, the wound healing without suppuration The clots of fluid which escaped on removal of the stitches contained dead embryos When the patient left the hospital a month later his anæmia and general condition had much improved on a thorough course of treatment with iron and arsenic

FIG 2.

Uteri of worm. Highly magnified.

Hypodermic injections of perchloride of mercury were also tried but without any perceptible change in the number of embryos present in the blood. In this case, as in the first, no ill effects followed the operation

Remarks by Mr EVE *and* Mr BARNARD —By one of those strange coincidences which occur with such astonishing frequency in hospital practice the above cases of filariasis were admitted consecutively into the same bed in the London Hospital A point of extreme interest about Case 1 was that on removal the tumour was found to contain a large number of the parent worms of filaria Bancrofti, two specimens of which were secured Judging from this case it would seem that the name "varicose groin glands" is unfortunate, if the word "varicose" is intended to imply that they result from lymph congestion or are a dilated collateral circulation, the result of obstruction to the main lymph channels of the abdomen We are indebted to the late house surgeon, Dr. Spillane, for his careful observations and notes of these cases.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Infections from Unsound Meat —Chemical Composition in Relation to Germicidal Action —Exhibition of Specimens —Annual Meeting —Election of Officers —Report of the Committee on Pseudo tuberculosis

A MEETING of this society was held on May 16th, the President, Dr PAYNE, being in the chair

Dr H E DURHAM made a communication on Infections from Unsound Meat He had investigated two outbreaks at Surbiton and Salford and had studied the action of the serum from these patients on cultures of various bacteria As a general result he found that they gave a definite agglutinating reaction in high dilutions with culture of the bacterium enteritidis This reaction was given with all varieties of this bacillus although there were individual peculiarities in their behaviour He also added the serum to cultures of typhoid and other bacilli, but found no reaction unless he used low dilutions of serum With low dilutions, however, he obtained the agglutinating action Dr Durham pointed out that the strength employed (1 in 10) would give agglutinating reaction with serum from many cases besides those of enteric fever and that it could not be regarded as a specific reaction For purposes of diagnosis of enteric fever the clinical methods of sero-diagnosis ordinarily followed were quite unreliable, a much higher dilution being necessary In the cases of meat poisoning to which he referred there was no reaction with high dilutions except to cultures of the bacillus enteritidis Dr Durham thought that there was no doubt that cases of meat poisoning were due to infection by organisms and the reactions he had obtained showed that in his cases the infection was due to the bacillus enteritidis In most of the epidemics where the source of the meat could be traced it had been shown by different observers that animals from which the meat came were themselves diseased before death Lantern slides were shown exhibiting photographs of the clumping reaction in tubes of cultures, and also micro-photographs showing the polymorphism of the bacillus enteritidis —Dr WASHBOURN was sorry that Dr Durham had not gone more fully into the proofs that these cases were always due to an infection and not to absorption He agreed that in the majority of cases this was so The old methods of removal of alkaloidal ptomaines from the organs many hours after death were open to many objections, and it was probable that they did not produce the symptoms met with during life He was interested to hear what Dr Durham had said as to the unreliability of the serum reaction in enteric fever as usually applied, but he thought that in the wards it gave very accurate and useful information —Mr A G R FOULERTON could not agree that all the evidence was in favour of cases of meat poisoning being infective The mere presence of the agglutinating reaction did not prove this point, as if a horse were immunised by the inoculation of diphtheria toxins, bacilli being excluded, the blood afterwards gave a good agglutinating reaction with cultures of the diphtheria bacillus He also quoted Gaertner's and other cases in which after the ingestion of large quantities of unsound meat symptoms appeared within three hours which would not be likely with a bacterial infection In one outbreak which he had investigated the symptoms came on very soon after taking some ham and the severity of the symptoms were proportionate to the amount of meat which the individuals had taken, which was consistent with poisoning by toxins rather than organisms Further, there was no

direct evidence that the bacillus enteritidis had ever been found in the blood of patients during life

Dr JAMES RITCHIE (Oxford) read a paper on Chemical Composition in Relation to Germicidal Action In his investigations Dr Ritchie employed normal solutions of the various chemical substances investigated and an emulsion of the typhoid bacillus in water, uniform diffusion being obtained by filtering off all clumps by a plug of sterilised glass wool. He investigated groups of metallic salts grouped according to Mendeléeff's law and he found that with metallic salts the toxicity varied with the atomic weight of the base, the acid radical not affecting the result With the halogens, chlorine, bromine, and iodine the same relation to the atomic weight was observed With groups of organic bodies in each group the members with the higher molecular weight had the greater germicidal action , There were a few exceptions Lithium did not take the place which it should among the monatomic group, but it presented also notable chemical differences such as the insolubility of the carbonates Neither the mineral nor the fatty acids conformed to this rule, but in both cases their germicidal action was proportional to their chemical "avidity,"

The following card specimens were exhibited —

Dr A E GARROD Fibrosis of the Lung

Dr W S LAZARUS BARLOW Syphilitic Stricture of the Bile-Duct

Dr H D ROLLESTON Columnar celled Carcinoma of the Tail of the Pancreas

Mr. T LISTER (1) Tuberculous Gastric Ulcer, (2) Ulcerative Colitis, and (3) Ulcer of the Duodenum in elæna Neonatorum

Dr J H DRYSDALE Tuberculosis of the Inferior Vena ava

Dr H A. LEDIARD (1) Pin in the Appendix, and (2) Congenital Fibrous Tumour on the Neck of a Child

Subsequently the annual general meeting of the society was held, Dr PAYNE being in the chair The report of the Council was read and adopted It announced that an index of the last 13 volumes was being prepared and that the task had been entrusted to Mr Shattock

A very cordial vote of thanks was given to Dr Payne, who has occupied the chair with great success for the last two years, to the retiring honorary secretary (Mr D'Arcy Power), and to the other retiring officers The ballot for the election of officers for the season 1899–1900 resulted in the election of the following list —President Mr William Watson Cheyne Vice Presidents Dr F W Mott, Dr G Newton Pitt, Dr F Charlewood Turner, Dr German Sims Woodhead, Mr Anthony A Bowlby, Mr G H Makins, Mr Alfred Pearce Gould, and Mr Charters J Symonds Treasurer Dr Sidney Coupland Honorary Secretaries Dr Humphry D Rolleston and Mr Charles Alfred Ballance Council Dr John Abercrombie, Dr J Rose Bradford, Dr Sheridan Delépine, Dr James Galloway, Dr Archibald E Garrod, Dr Herbert P Hawkins, Dr R G Hebb, Dr William Hunter, Dr Cyril Ogle, Dr J W Washbourn, Mr William H Battle, Mr Cecil F Beadles, Dr F G Hopkins, Dr H A Lediard, Mr John R Lunn, Professor John McFadyean, Mr D'Arcy Power Mr J H Targett, Mr Frederick C Wallis, and Mr Edgar Willett

The committee appointed to consider the nomenclature of the condition sometimes described as "Pseudo tuberculosis" brought up its report The committee reported that — 1 The term "pseudo-tuberculosis" had been applied to a number of distinct morbid processes which agreed only in the presence of small nodular tubercles Amongst them were (*a*) a number of bacterial infections caused by bacilli and cocci of various species, (*b*) blastomycosis, (*c*) streptothricosis, (*d*) aspergillosis, (*e*) protozoal infection, and (*f*) pathological conditions arising from the presence of higher animal parasites in the lungs 2 Confusion had arisen from the employment of the word "tubercle" in two senses (1) as a general anatomical term for a small nodule and (2) in a specific sense for the nodular lesions of the disease produced by the tubercle bacillus of Koch 3 The word "tubercle" should no longer be used as a general anatomical term but if used at all it should be only as a designation of the nodular lesions produced by the tubercle bacillus To prevent ambiguity, however, they suggested that all lesions having th form of "tubercles" should be called generally "r e by Koch's bacillus being distinguis es,' and that the nodules prod like manner be distinguished use if known, as, for example, "glanders nodule," 'aspergillar nodule," or; if their cause was not known, by some distinctive designation not involving any reference to the word "tubercle." They further suggested that the diseases themselves (as distinguished from the lesions produced) should when possible be designated in accordance with the plan indicated in headings (*b*), (*c*), and (*d*), "blastomycosis," &c The term "pseudo-tuberculosis" would then become superfluous and ought to be discarded altogether —The report was signed by Dr J F Payne (chairman), Professor John McFadyean, Mr S G Shattock, Dr J W Washbourn, Professor G Sims Woodhead, and Mr A G R Foulerton

CLINICAL SOCIETY OF LONDON

Right Colotomy for Chronic Colitis — Empyema of the Maxillary Sinus — Pathology and Treatment of Chronic Empyema of the Maxillary Sinus

A MEETING of this society was held on May 12th, the President, Mr LANGTON, being in the chair

Dr HALE WHITE and Mr GOLDING BIRD contributed a paper on Three Additional Cases of Right Colotomy for Chronic Colitis The object in all three cases was to give the colon absolute rest Case 1 —The patient was a woman, aged 36 years, seen with Dr A E Taylor She had had membranous colitis for 20 years and latterly great pain, with almost complete inability to take food She was wasted, anæmic, and a complete invalid, and was unable to take any exercise. The whole colon was tender to pressure On May 13th, 1896, the first stage of right lumbar colotomy was performed, the bowel being opened six days later The patient was relieved from pain and gained steadily in strength In May, 1897, the artificial anus was closed In November, 1898 she said that she was perfectly well, she ate ordinary food and took active outdoor exercise Case 2. —The patient was a woman aged 31 years In September, 1896, she began to have abdominal pain and soon, because of the pain, gave up taking solid food Her illness continued until her admission into Guy's Hospital, under the care of Dr Pye-Smith, in December, 1897, when she was found to be passing membrane She was then very anæmic and weak and was suffering severely As she became worse in spite of all medical treatment the first stage of right lumbar colotomy was performed on March 3rd, 1898, the bowel being opened on March 8th. She remained four months in the hospital and when she left she was in perfect health and had remained so up to the last time she was seen It was proposed to close the artificial anus this spring The patient was averse from hurrying as she was so well in the present condition. Case 3 —The patient, a man, aged 35 years, had been in the tropics and Egypt. Eight years ago he had had diarrhœa with bleeding This had continued on and off till his admission to Guy's Hospital He had suffered much from abdominal pain. He had been treated in hospital medically without any success He was admitted into Guy's Hospital in November, 1888 He had continuous diarrhœa, had lost control over the bowels, was very wasted, anæmic, and had the appearance of a man who had not much longer to live As he was becoming worse, on Dec 31st, 1898, the first stage of a cæcotomy was performed and the bowel was opened five days later He gained much flesh and colour, quite lost his abdominal pain, and left the hospital at the end of February feeling well enough to work and in May reported himself as very well He was shown to the society and appeared to be well, but complained of being prevented from working owing to escape of liquid fæces from the wound when he stooped. Dr Hale White and Mr Golding Bird pointed out that all *a priori* argument was in favour of a right colotomy for chronic disease of the colon, for it secured absolute rest for that structure, and the cases now brought forward showed clearly that the colon was not necessary for the maintenance of perfect health They recommended palliative or curative right-sided colotomy for severe and otherwise hopeless examples of the following diseases (1) intractable membranous colitis, (2) all forms of chronic ulceration of the colon which had resisted medical treatment and which were obviously otherwise incurable, most cases of very chronic dysentery were probably to be cured without colotomy, and (3) cases of idiopathic dilatation of the colon The colotomy must be right-sided and colotomy was preferable to cæcotomy, for when the

latter operation was done fluid fæces escaped from the artificial anus and this gave rise to much trouble, while further it was difficult to prevent some fæces passing on into the colon In the three cases of membranous colitis reported it was interesting to observe that the formation of membrane ceased directly the bowel was stitched to the skin and before it was opened Its formation appeared to be reflexly inhibited and this was of importance as pointing to a large neurotic element in the cases—a view which was supported by the fact that membranous colitis was most common in women, that all the cases operated upon had been in women, and all had had a history of pelvic troubles. It was not necessary to wash out the bowel from the artificial to the natural anus More experience was needed before deciding upon the time for which the artificial anus should be left open, but it should certainly not be less than six months.—The PRESIDENT said that the results of Dr Hale White and Mr Golding-Bird seemed to show that an opening into the ascending colon would relieve this terrible condition He himself had a case under his care at the present time in which he proposed to open the colon for this disease. He asked whether, from the point of view of surgical treatment, any distinction was drawn between membranous cases and those of mucous colitis He also asked whether there had been any difficulty in closing the opening in those cases in which it had been kept open for several months —Dr HINGSTON FOX mentioned the case of a gouty woman, 48 years of age, who was under his treatment for chronic colitis. She had hæmorrhage from the bowel for some time which was attributed to hæmorrhoids In August last she took to her bed with severe hæmorrhage and frequent motions containing much mucus and pus Enemata and local treatment caused much irritation The symptoms ultimately subsided very rapidly after the sphincter had been forcibly stretched by Mr Charters Symonds and she was well for some months, but lately there had been some return of symptoms.—Dr NORMAN DALTON asked whether the method had ever been tried in cases of acute ulcerative colitis —Mr CHARTERS SYMONDS said that in the case mentioned by Dr Hingston Fox he had been led to dilate the sphincter because the disease appeared to be localised to the lower end of the rectum and he mentioned another case in which there was hæmorrhage from the rectum in which examination revealed nothing abnormal and in which the symptoms ceased after dilatation of the sphincter He thought that right colotomy was better than left and mentioned a case in which he regretted that he had chosen the left operation. The patient was a man, 60 years of age, who had had four attacks of hæmorrhage from the bowel. There were hectic temperature and signs of ulceration A left inguinal colotomy was performed and the lower part of the bowel was washed out with temporary relief, but the bowel contracted and the artificial anus could not be closed. At the necropsy many nodules of new growth could be seen on the wall of the intestine and Mr Symonds thought that longer relief would have been given if the ascending colon had been opened.—Mr W J WALSHAM asked what method was adopted for closing the wound —Dr HALE WHITE in reply, said that the degree and not the variety of colitis was the guide as to surgical treatment. He did not know of any cases of acute ulcerative colitis which had been treated by this method —Mr GOLDING-BIRD, in reply, said that he had not met with difficulty in closing the wound. He used the same method which had been employed by Laurie, freeing the bowel round for three-quarters of an inch and then uniting the raw surfaces by Lembert's sutures. Cases of acute ulcerative colitis were seldom recognised. He mentioned one case in which a girl who was admitted for supposed painful anal fissure died with symptoms of acute colitis and subacute peritonitis and after death most extensive ulceration of the whole colon was discovered.

Dr STCLAIR THOMSON read a paper on Empyema of the Maxillary Sinus undoubtedly of two years' and probably of seven years duration, with persistent cough and regularly recurring headache, which was completely cured in eight weeks by simple drainage through a tooth socket He said that he recorded the case as there had been a tendency on the part of some rhinologists lately to disparage the method of treatment through the alveolar border which was first employed by Cowper as long ago as 1698. Indeed, some practitioners held that this method was quite futile in cases of long standing In the case which he related he had positively diagnosed the empyema two years before the patient was operated on and the history pointed to the presence of pus in the antrum of Highmore for possibly seven years During this period the patient had suffered from chronic cough which had resisted every treatment She had also for more than four years had what she described as a frightful headache lasting three days, and regularly recurring with the cessation of menstruation The maxillary sinus was opened with a drill through the alveolar border, a spiral (Ellis) drainage tube was inserted, and the cavity was washed out once daily with a simple alkaline lotion. At the end of a month the liquid came through quite clear and doubtless treatment might then have been discontinued. For the sake of security the washing out was continued at decreasing intervals for another month, when the drainage tube was removed and the opening allowed to close The patient's cough entirely ceased, the headaches never recurred again and the result was confirmed by observations nine months afterwards In all cases of empyema of the maxillary antrum—especially when there was already a hollow tooth socket—this simple method of treatment should be tried before having recourse to more severe operative measures. The opening was easily made, the patient was able to carry out the treatment at home, and it did not prevent a larger operation later if the suppuration proved intractable. The case also showed that a long history of empyema did not necessarily show that the case would resist cure by this easy method.

Mr T MARK HOVELL and Mr FREDERIC EVE read a paper on Cases Illustrating the Pathology and Treatment of Chronic Empyema of the Maxillary Sinus The paper demonstrated that chronic antral empyema was frequently associated with the formation of papillary outgrowths from the lining of the cavity, so abundant in some instances as to fill it These could only be effectually dealt with by free opening of the cavity and removal of the growth and even then they sometimes recurred. Antral suppuration was sometimes the earliest symptom of malignant disease commencing in that cavity In six consecutive cases related numerous papillary growths existed in three, a large polypus in one case, granulation in one case, and in only one instance was the lining membrane of the cavity natural. In the three cases presenting well marked papillary growths suppuration had existed for periods varying from five months to three years, while in a patient with polypoid growth the discharge from the nostril had existed for two or three years. The pus contained streptococci in three cases in which a bacteriological examination had been made. The treatment consisted in freely opening the antrum through the canine fossa so that the cavity could be inspected and the growths removed and in two instances a counter opening was made through the inner wall of the antrum at the level of the floor of the interior meatus The cavity was first packed with iodoform gauze and afterwards treated with antiseptic irrigation In one case the growths recurred and the antral wall was again scraped. The three patients whose antra contained papillary growths had previously been treated by tapping through the alveolus and the insertion of a tube without improvement. All the patients were cured except one who was greatly improved It was pointed out that the antral growths would tend to increase the mischief by causing retention of pus owing to the blocking of the orifice into the nostril or such a small opening as could be made through the alveolus The only treatment likely to be effectual was therefore free exposure of the cavity and removal of the growths Bare pieces of fangs projecting through the floor should be sought for The seventh case related was that of a man, aged 57 years in whom antral suppuration was the earliest symptom of malignant disease in that cavity On opening the antrum it was found to be filled with carcinoma, the existence of which had not previously been suspected The superior maxilla was subsequently removed successfully —Sir FELIX SEMON thought that it was possible to treat the great majority of cases successfully by the method of simple drainage through the alveolus although there seemed to be a tendency among the younger rhinologists in the direction of more complicated methods of procedure Most of the cases of antral empyema were due to dental trouble In a minority of cases of some standing there were papillary outgrowths, and opening and scraping as performed by Mr Eve and Mr Hovell were required, but the milder method should be tried first as routine treatment.—Mr

Mr Symonds agreed that alveolar drainage should always be the first step In the long standing cases where this was not enough the antrum should be opened and an artificial opening made in the inner wall below the inferior turbinated bone It was usual in such cases to find polypi or papillary outgrowths —Mr W J Walsham also spoke. He mentioned a case in which the empyema was found to be due to a fang which had been retained when the tooth with two other fangs had been extracted —Dr Scott Thomson said that he had seen cases heal after suffering for 18 months or two years Patients did not find the swinging likesome —Mr Eve, in reply, said that he and Mr Howell performed simple drainage through the alveolus first The cases which they had brought forward represented the minority in which this procedure did not cure the patients

OPHTHALMOLOGICAL SOCIETY

Tumours of the Iris —Unusual Form of Opacity of the Cornea —Vascular Formation in the Vitreous in Diabetes —Sloughing of the Cornea rapidly following on Fracture of the Base of the Skull —Primary Carcinoma of the Eyeball —Carcinoma of the Eye Secondary to that of the Lung —Traumatic Ptosis —Piece of Glass Localised in the Eye by Means of the Roentgen Rays —Eyeball with Fragment of Steel Lodged in its Coats —Solid Œdema of the Eyelids —Artificial Eyes —Filamentary Keratitis —Orbital Tumour

A clinical meeting of this society was held on May 4th, Mr H R Swanzy, President, being in the chair

Dr A H Thompson showed a microscopic section of a Tumour from a case which had been shown at a previous meeting of the society The portion of iris containing the tumour was removed and the patient now had vision equalling ⅔ in the eye The tumour was probably a spindle celled sarcoma

Mr Treacher Collins showed a case in which the tumour occupied the upper inner part of the Iris and the lens was cataractous The patient was a woman, aged 63 years, who had had a black spot in the eye since childhood The piece of iris was removed and the cataract was extracted at the same time The growth consisted of large endothelial cells with sharply defined nuclei It resembled in structure pigmented moles of the skin and was probably innocent —Mr John Griffith thought that Dr Thompson's case was a myoma from the root-shaped character of the nuclei and that Mr Collins's case was a large round celled sarcoma

Mr Treacher Collins showed an Unusual Form of Opacity of the Cornea It was present in both eyes, but was more marked in the left It had much the appearance of a broken cobweb stretched across the cornea, the lines were in the corneal substance They were possibly the tracks of old blood vessels after interstitial keratitis but they were very wide for blood vessels and did not extend to the periphery of the cornea —Mr Juler thought that they were tracks of old blood vessels, there was a suspicion of scarring of the angles of the mouth which he thought made previous interstitial keratitis probable.—Dr Breuer thought that they were the lines which were sometimes seen in the superficial punctate keratitis described by Fuchs —Mr Silcock suggested that they might be blocked lymphatic vessels which had resulted in bands of fibrous tissue —Dr Hill Griffith asked if the possibility of the lines being due to a vegetable fungus had been considered

Mr Arnold Lawson showed a patient who had been known to be diabetic for three years and who exhibited a Vascular Formation in the Vitreous His sight had failed for two years in the right eye and for six months in the left The right lens was opaque, in the left eye there was at first a vitreous haze which obscured the details of the fundus As this cleared there was found a connective tissue formation consisting of feathery tufts proceeding from a central stalk richly supplied with blood vessels

Dr Lediard showed a man, aged 38 years, who had been knocked down by an engine and who exhibited Sloughing of the Cornea rapidly following on Fracture of the Base of the Skull When first seen he was semi comatose, he had right facial paralysis, the eye remaining open, severe scalp wounds, and the escape of cerebro-spinal fluid from the ear, the fifth nerve was uninjured Notwithstanding the care that was taken of him his cornea sloughed and the eye had to be excised The probable reason for the sloughing was the exposure of the cornea consequent on the facial paralysis and the condition of semi insensibility induced in the cornea by the partial coma

Mr Simeon Snell (Sheffield) showed a specimen of Primary Carcinoma of the Eyeball The patient was a man aged 69 years There was a history of an injury to the eye (cornea) 14 years before When first seen almost the whole of the cornea was involved in a nodulated, hard, irregular growth Careful examination failed to disclose any growth elsewhere in the body The eyeball was enucleated the orbit was cleared out, and chloride of zinc paste was applied to the socket The growth had perforated the globe posteriorly Mr Treacher Collins examined the eyeball and reported that the appearances of the growth were typically those of carcinoma and that it originated within the globe but in which structure it was impossible to say —Mr Collins said that it was formerly the opinion that growths primarily occurring in the eye were sarcomata or gliomata but it was known now that carcinomata occurred starting from the tubular glands of the ciliary body, they might also start in the pigment epithelium of the iris and choroid he thought that Mr Snell's case probably originated in the ciliary body —Mr Silcock had seen orbital tumours having a structure similar to the one in question, possibly these might be endotheliomata and not epitheliomata —Dr Bronner remarked that as visceral carcinoma might exist for a long time without revealing itself they ought to be cautious in accepting a carcinoma in the eye as a primary growth —Mr Jessop asked whether there had been any recurrence

Mr John Rowan showed a specimen of Carcinoma of the Eye Secondary to that of the Lung It was a scirrhous cancer occupying the lower part of the fundus and detaching the retina, its origin was in the glands or mucous membrane of the bronchi, the primary and secondary growths were similar in character

Mr Snell showed a stereoscopic photograph of a case of Traumatic Ptosis

Mr Mackenzie Davidson showed a Piece of Glass localised in the Eye by means of the Roentgen Rays. A fragment of a Florence flask during a chemical experiment went into the patient's eye It was shown by the x rays quite clearly, but was less dense than metal in appearance The only modification of method used in this case was that the rays were passed obliquely through the eye so as to avoid bone as much as possible

Mr George Mackay showed an Eyeball with Fragment of Steel Lodged in its Coats with skiagrams A traumatic cataract had been formed, which was removed, leaving the media clear The position of the foreign body could be seen by the ophthalmoscope As it appeared to be encapsuled it was not interfered with, after an interval of quiescence the vision failed and the eye became irritable, the iris had a tawny brown colour Removal of the foreign body by the magnet failed After enucleation it was found fastened to the coats of the eye In order to trace the parts of the eye discoloured by the rust of the iron Prussian blue was formed with it, the corneal epithelium and the filtration angle were the parts most widely stained Descemet's membrane escaped

Mr Anderson Critchett showed a case of Solid Œdema of the Eyelids The patient had erysipelas in 1894 followed by another attack later Fulness of the lids followed, they were treated by pressure, puncture and incision without benefit The mass had been excised by Mr Higgens but had recurred Mr Eyre had photographed the same case five years before At that time the upper lids were more swollen than the lower He had seen seven similar cases all of them after erysipelas —Mr Frost, Mr Silcock, and Mr Mackay spoke of similar cases

Mr. Critchett also showed samples of Snellen's Artificial Eyes

Dr Rayner Batten showed a woman, aged 29 years, with Filamentary Keratitis She had had chronic conjunctivitis one year A number of threads were seen hanging from the surface of the cornea near its edge, they were about one millimetre long and consisted of a twisted rope of epithelium No vesicles were seen They were symmetrical in the two eyes

Mr Juler showed a case of Orbital Tumour There was a history of proptosis for two months A fluctuating tumour was felt at the upper inner margin of the right orbit, dark

blood escaped on tapping it, he thought it was a vascular sarcoma.—Mr LAWFORD asked if the nose had been explored as the case might possibly be a distended ethmoidal cell.—Mr LANG had met with a similar case consisting of broken-down nævoid tissue.

BRITISH GYNÆCOLOGICAL SOCIETY

Salpingitis—Pyosalpinx

A MEETING of this society was held on May 11th, the President, Dr H. MACNAUGHTON-JONES being in the chair.

Mr J. W. TAYLOR (Birmingham) read a paper on the Treatment of Gonorrhœal Salpingitis. In considering the question of the curability of gonorrhœa in women he related the history and outcome of an inquiry extending over many years and maintained the following propositions: 1. That a large number of women who are suffering from tubal disease have been at some time or other exposed to the infection of syphilis as well as of gonorrhœa, that these undoubtedly show marked improvement after a prolonged course of mercury and iodides, and in the course of this treatment, unless acute pyosalpinx intervenes (in which case medicine is useless) it is the rule rather than the exception for all gross physical signs of disease to slowly and permanently disappear. 2. That many cases in which there is no history of syphilis, including cases in which there is the unmistakeable history of gonorrhœa pure and simple as the sole cause and starting point of tubal disease, do similarly improve and get permanently well under the same course of treatment, provided always that the disease stops short of acute pyosalpinx and its dangerous complications. 3. That acute pyosalpinx is peculiarly liable to occur in the first place on the left side of the body and its special severity is probably due to secondary infection from the rectum, that such cases whenever possible should be treated by free incision of the posterior vaginal fornix, by thorough exploration and emptying of all pus cavities from the pouch of Douglas, and by iodoform gauze drainage, and that this is far preferable to the older operation of removal of the appendages which is not only much more dangerous but is peculiarly liable to be followed by fæcal fistula an operation sequel sometimes worse than death itself. 4. That such cases of mixed infection and acute suppuration, treated by operative evacuation of the pus with or without removal of the appendages, do sometimes not only recover but remain permanently well without further treatment, the acuteness of the inflammation appearing to terminate the process of infection. In other cases recovery is not so complete, relapses are met with, and these cases should be followed up by a course of specific treatment, the beneficial result of this being often immediately manifest when the wound tissues are unhealthy and the healing is delayed. 5. That occlusion of the tubes and pari tubal adhesions consequent on gonorrhœal salpingitis have no direct specific causation and must be regarded rather as secondary mechanical results of the local peritonitis which has been caused by salpingitis. Their absorption and disappearance will not therefore be secured by the cure of the gonorrhœa and sterility may persist although gonorrhœa may be entirely eradicated from the system. 6. That in gonorrhœa of the pelvis there will probably remain a residuum of intractable cases, particularly cases of complication with other diseases such as fibroids of the uterus. That in these cases operative removal of the organs affected will still be required, and that vaginal hysterectomy, whenever possible with or without removal of the appendages, is not only the most rational operation in theory but is productive of the best final results.

Dr JOHN CAMPBELL (Belfast) read a paper on a Case of Double Pyosalpinx in which one of the tubes contained 19 ounces of pus. The case presented several features of interest independently of the size of the tubes—viz., the absence of pain, the almost entire absence of adhesions, and the absence of anything in the history which would explain the origin of the pus. The patient was aged about 27 years, she had been married 10 months, she had never been pregnant, and she had menstruated regularly with only occasional pain. The larger tube was aspirated before removal and contained 19 ounces of pus. The smaller tube was removed entire and contained about three and a half ounces. Both ovaries were much enlarged, firm and tough and were resected. The patient now enjoyed good health and menstruated regularly.

In the discussion on these papers Mr A. G. R. FOULERTON said that he examined 16 consecutive cases of pyosalpinx and found the gonococcus the bacillus coli, the staphylococcus albus, and the tubercle bacillus each in two cases, and the streptococcus in one case. According to various statistics published since 1889 the contents of the tubes were sterile in 60 per cent. of cases, the gonococcus was found in 20 per cent. and other micro-organisms in the remaining 20 per cent. In the last group the infection had no doubt been primarily gonorrhœal and there was a secondary infection by the bacillus coli or the tubercle bacillus. The probable explanation of the sterile cases was that they were of old standing, and the germs originally present had died out from lack of nourishment or from the toxic effect of their own excretory products. The treatment of gonorrhœa in women was too often confined to the vaginitis. In reality, primary gonorrhœal vaginitis did not occur. The initial lesion was urethritis or cervicitis, the vaginitis being secondary. This had been proved repeatedly by bacteriological examination. Consequently the treatment of the cervix was most important in cases of early gonorrhœa.—Mr R. H. HODGSON thought that it made very little difference whether pyosalpinx were due to syphilis or to gonorrhœa for mercury acted on both and was a drug well borne by women. By thus treating the cervix the disease itself could be arrested in its early stages.—Dr GEORGE ELDER (Nottingham) said that he had often found that patients with large pus-tubes were able to get about quite well, having neither pain nor fever.—Dr WILLIAM TRAVERS, Mr C. RYALL, Dr ARTHUR GILES, and Dr H. MACNAUGHTON-JONES also took part in the discussion.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY

Abscess of the Kidney—Inversion of the Uterus—Gout—Anencephalous Monster—Cases and Specimens—Annual Meeting

A MEETING of this society was held on May 5th, Mr EDWIN LEE, the President, being in the chair.

Dr J. STEWART described a case of Primary Abscess of the Kidney which occurred in a woman, aged 35 years. On June 28th last the patient complained of pain in the left side and of cough. She apparently improved under treatment, but a month later there was a return of the pain and she had shivering, profuse night sweats, and a temperature of 103° F. On examination of the abdomen a tumour was discovered in the left renal region. Its surface was smooth and its lower end rounded. It felt solid, no fluctuation being detected. It was tender on handling. A band of resonance passed over its surface. The amount of urine passed in the 24 hours never exceeded from 18 to 22 ounces and there was never any pus found in it. The kidney was exposed by the usual oblique lumbar incision, a trocar was passed into it and 16½ ounces of pus were evacuated. The patient made a good recovery.

Dr HELLIER read notes of a case of Chronic Inversion of the Uterus treated six months after labour by Aveling's repositor. It was reduced in about 48 hours.

Dr BAIN (Harrogate) read a paper containing an experimental contribution to the study of Gout.

Mr HERBERT ROBSON described a case of Anencephalous Monster. The mother was 37 years of age and had had two children previously—the last one 10 years ago. The last day of her menstruation was on June 6th, 1898 and she expected her confinement about March 13th, 1899. As a matter of fact it did not come off until April 13th, and then it had to be induced on account of the distress produced by the hydramnios. The membranes were ruptured at 10 P.M. on April 12th, labour pains began at 11 P.M., and the child was born at 3.40 P.M. on the following day. The labour was a very difficult one. There was a face presentation and a rigid os which yielded to the application of cocaine. Forceps were of no use and not having a cephalotribe at hand the patient being under chloroform Mr Robson managed by inserting the left index finger into the mouth and the sharp hook of the crochet into the exposed base of the skull in the neighbourhood of the cribriform plate of the ethmoid bone to get a good purchase and so to terminate labour. There was post-partum hæmorrhage and considerable shock following the labour, but the patient was making an excellent recovery. The total amount of liquor amnii collected was 20 pints, and Mr Robson believed the case to be a genuine

one of 10 months pregnancy Dr. Braithwaite saw the case in consultation.

The following cases, pathological specimens, &c., were shown —

Dr ALLAN. A shell showing Localised Hyperemia from a patient who suffered from tuberculosis.

Dr BARRS. Tubercle Bacilli from a Pleuritic Effusion.

Mr LITTLEWOOD Perforated Gastric Ulcer treated by excision of the ulcer and closure of the perforation (patient and specimen shown)

Dr WARDROP GRIFFITH Cirrhosis of the Liver with Hemorrhage from the Œsophageal Veins

Mr W THOMPSON Inflamed Testicle with Twisted Cord simulating Strangulated Hernia.

Dr. CHURTON A specimen of Dilated Prostatic Urethra Bladder Ureters, &c. from a boy eight years of age, supposed to be in good health until six days before his death (from uræmia)

Dr MANTLE A Recent Addition to the Royal Hospital Infirmary Museum—Dicephalic Monster

Mr WARD Hydronephrosis from Impacted Calculus.

Mr SECKER WALKER Dr Ascher's Transparent Perimeter for Rapid Measurement of the Field of Vision.

Dr TREVELYAN A Case of Lupus of the Larynx in a girl, aged 19 years, who had scars of old lupus on the face.

The annual meeting of the society was held at the close of the ordinary meeting The annual report and balance-sheet were presented and passed. The members of the society numbered 340 and the average attendance at the meetings had been 60 The following officers were elected for the ensuing year —President Professor C J Wright. Vice-presidents Dr Gordon Black (Harrogate) and Dr A. G Barrs Mr Edwin Lee (Dewsbury), Dr Mouillot (Harrogate) Dr Wardrop Griffith, Dr H. J Clarke (Doncaster), Mr B G A Moynihan, and Mr Secker Walker took the place of the six retiring members of the committee Honorary secretaries Dr E F Trevelyan and Mr Lawford Knaggs

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EDINBURGH OBSTETRICAL SOCIETY

Œdema Glottidis during Pregnancy —Puerperal Hyperpyrexia —Pelvic Contraction —Peritoneal Effusion.— Exhibition of Specimens

A MEETING of this society was held on May 10th, Dr HALLIDAY CROOM, President being in the chair

Dr LUCAS read a paper on a Fatal Case of Œdema Glottidis during Pregnancy The patient who was in about the eighth month of pregnancy developed an acute inflammatory affection of the larynx with a temperature of 101° F There was no membrane on, or congestion of, the pharynx, no membrane was coughed up nor were there any enlarged glands The urine was free from albumin The patient died in three days, having refused to allow tracheotomy to be performed

Dr J LAMOND LACKIE read a paper on Puerperal Hyperpyrexia with an Illustrative Case Hyperpyrexia, he said, might be broadly divided into two classes—the pre-lethal type of Wunderlich and those cases in which the high temperature occurred some time before the death of the patient and was in itself the direct cause of a fatal issue or from which the patient recovered The pre-lethal type in obstetric practice was probably met with most commonly just before death from eclampsia But hyperpyrexia occurring during the course of a puerperium must be extremely rare. Pye-Smith of Sheffield recorded a case where after a first normal labour the temperature ranged from 104° F to 106 2° for three weeks Wunderlich stated that after parturition the temperature might reach 107 6° and in a few days fall to normal without any apparent cause A case was [illegible] two years where the temperature rose to 110 2° at death [illegible] the night less day following labour, this was probably [illegible] haze w[illegible] The following case was of interest. A [illegible] red there years, with five children, each being [illegible] of feathery difficulty by forceps owing to a con- [illegible] bled with bloo labour with her sixth child. On [illegible] ARD showed a L that as a result of her previous [illegible] wn by an engine so torn that the tear, to the left [illegible] rapidly following o. the fornix She had been [illegible] en first seen he w labours would be dangerous [illegible] paralysis, the eye rel on rupture Forceps had [illegible] he escape of cerebro-nertia uteri The patient [illegible] was uninjured N

did perfectly well until the fourth day, when she had suddenly a severe rigor with a temperature of 105° As the vaginal discharge was fetid an intra-uterine douche was given and antipyrin was administered. Two hours later the temperature was [illegible]° and the patient was delirious, and the pulse was very feeble and so rapid that it could not be counted. An ice-pack was given and the temperature was taken in the rectum every 10 minutes. This gradually fell to [illegible]° and after suspension of the ice-pack went down to 98·5°. The patient seemed much better and consciousness had returned. For 20 hours she continued fairly well when another rigor occurred, the temperature rising to 110°. The patient was quite comatose and apparently dying but the same treatment restored her to consciousness and a favourable state. Meanwhile, intra uterine douches were used every four hours and per vaginam nothing abnormal could be felt. 24 hours after this attack she had another rigor the temperature rising to 110°, and shortly afterwards to 112°. The patient was comatose and no pulse could be felt at the wrist; her breathing was stertorous and death was expected every minute. The ice was again applied; 30 grains of antipyrin were administered per rectum and an antiseptic douche was given when a large slough came away with a great quantity of foul-smelling discharge. The temperature gradually fell to 104°, when the special treatment was suspended and stimulants were given freely by the mouth and subcutaneously The temperature gradually fell until it was very subnormal, on the next day it was normal. A large cervico-vesical fistula formed, so large that it admitted two fingers. The patient made an excellent recovery and the fistula was afterwards successfully operated on This was a case of severe septræmia, there being no evidence of pyæmia or septicæmia, the case of ptomaine poisoning was so severe as to cause hyperpyrexia on three successive nights. Pyæmia and septicæmia, without any reference to the puerperium account for 17 per cent. of the cases of temperature above 106°, but Dr Lackie could find no record of a case in which an absorption, as occurred in septræmia, was the cause of hyperpyrexia. Before the third rigor there was a peculiar restlessness especially in the eyes, and a deceptive sense of well-being in the patient. This condition had also been noted in acute rheumatism as premonitory to hyperpyrexia. As regards the treatment, an ice-pack was used as the cold bath treatment was at the moment impossible. The latter through the necessary movement threw a greater strain upon the heart. The temperature should be reduced by active measures till it was only between the highest recorded and that to which it was desirable to fall Experience showed that the temperature continued to fall just as much after as during the application of ice or the use of the cold bath.—The PRESIDENT mentioned a case which he had seen where the temperature rose to 110° for three successive nights It was evidently neurotic in origin

Dr HAIG FERGUSON read a paper on Labour complicated by a minor degree of Pelvic Contraction in Primiparæ and Multiparæ.

Dr FORDYCE read notes on two cases of Peritoneal Effusion

Dr J W BALLANTYNE exhibited frozen sections of Imencephalic Fœtus, Anencephalic Fœtus, and Fœtus with retroflexion of the spine, &c

Dr FORDYCE showed an Ovarian Tumour with a pedicle twisted to the size of thin cord, it was removed from an insane patient whose mental condition had not undergone any improvement as a result of the operation

The PRESIDENT showed a Cystic Ovary removed for Mittelschmerz and an Ovarian Tumour from a patient, aged 68 years, who developed dementia and died in six weeks

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IPSWICH CLINICAL SOCIETY —A meeting of this society was held on May 11th, Mr S O Eades, the President, being in the chair —Mr Hoyland showed three young patients with Mitral Disease, to illustrate the marked contrast in general physical development met with in the subjects of heart lesions —Mr Fryer showed a man in whom the physical signs of both Mitral and Aortic Regurgitation were present, the murmurs being audible over a very large area There was marked pulsation of the carotids and pulsation of the retinal artery alternating with a venous pulse The man enjoyed good health —Mr Fryer also showed the Suprarenal Bodies from a case of Addison's Disease in which there had been very little pigmentation. The left

suprarenal body was diseased —Mr Eades showed a case of Chronic Dry Eczema —Mr J R Staddon showed a man with a Rounded Bony, Hard Prominence on the Right Posterior Wall of the Pharynx He considered that the case was one of disease of the cervical vertebræ, probably the result of previous caries —Dr Brogden read notes of a case of Diphtheria in which antitoxin was administered The attack was a mild one, but 12 days after apparent recovery a rash resembling that of scarlet fever appeared, with rapid pulse and high temperature The patient was very ill, much more so than during the diphtheritic attack. Dr Brogden was inclined to ascribe the second illness to the effect of the antitoxin —Dr H H Brown showed the Appendix Vermiformis removed from a case of Recurring Appendicitis in a boy The operation was one of considerable difficulty owing to the firm matting together of the cæcum, omentum, and intestine The patient made an excellent recovery —Mr Corfe showed (for Dr Vincent) 1 A woman with an Abdominal Tumour the exact nature of which was doubtful It was impossible to say from the symptoms whether it was an omental growth or a fibroid growth from the uterus 2 A case of (?) Chronic Meningitis due probably to specific disease of the cranial bones with adherent cicatrices in the scalp The patient suffered from insomnia and was said to have had some maniacal attacks, and was addicted to the use of morphia. His condition was improving under iodide of potassium —Mr Hossack opened a discussion on the Present Epidemic of Influenza He referred specially to the period of incubation, which appeared to vary to the slow pulse and subnormal temperature met with, and to the excellent effect of antiseptic treatment in restoring the pulse and the temperature to the normal He had seen six cases of intractable urticaria following influenza and jaundice was mentioned as a rare sequela.—Dr H H Brown considered that the period of incubation was generally about five or six days and mentioned that the Clinical Research Association now advertised that they could confirm the diagnosis by a bacteriological examination of the sputum He also mentioned a case in which acute diabetes of severe type followed influenza The case recovered rapidly under treatment, although the patient appeared to be almost *in extremis* when treatment was begun, and after enjoying perfect health for some years diabetes recurred and the patient died A similar case had been recorded and it was an interesting question why diabetes occurring as a sequela of influenza should be more amenable to treatment than when it occurred independently, as it certainly seemed to be in this case —A discussion followed in which Mr Staddon, Mr Fryer, Dr Fowler Ward, Mr Pridmore, Dr Ward, and Dr Sinclair took part

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY —A meeting of this society was held on April 28th, Mr Alexander Miller being in the chair —Dr John H Teacher read a paper entitled, "William Hunter, Anatomist a Lecture with Demonstration of Preparations from the Obstetrical Series of the Hunterian Museum in Glasgow" The lecture commenced with a protest, implied by the title, against the commonly accepted view that it was as an obstetrician that William Hunter deserved to be remembered Though nowadays his reputation was chiefly obstetrical and rested on the fame of his great work of obstetric anatomy ("Hunter's Gravid Uterus") and the share he had in reforming the practice of midwifery in England it was to anatomy and to the organisation and reformation of medical education that his zeal talents and fortune were chiefly devoted The revolution which William Hunter effected in the teaching of anatomy by the establishment of full systematic courses of lectures, and of facilities for dissection by students, and his views as to the importance of anatomy and what a teacher of it should aim at were briefly set forth Dr Teacher next traced the early part of Hunter's career and the circumstances which chiefly determined its direction, the friendship with Cullen, which turned him from theology to medicine, the kindness to him of James Douglas, anatomist and accoucheur, which determined him to settle in London his leanings towards the practice of surgery, and his ambition to teach anatomy and the means by which he made himself fit to do so In regard to the last Dr Teacher referred particularly to his early anatomical writings his studies in Paris in the winter of 1743-44, regarding which information had been obtained from papers preserved in the Hunterian Museum, and his second visit to the continent in 1748 Hunter's first opportunity of teaching came in 1746 in the form of an invitation from a "Society of Naval Surgeons" to give a course of lectures on operative surgery To this they asked him to add a course of anatomy, out of this course arose the famous Great Windmill street School of Anatomy The circumstances which turned Hunter from surgery to midwifery were then indicated and his practice as a physician and accoucheur (and anatomist) was illustrated by giving an account of his diary of attendance on Queen Charlotte, which was preserved in the Hunterian Museum, and by quotations from his midwifery lectures relative to puerperal fever, bleeding in pregnancy, the forceps, and craniotomy The meeting concluded with a demonstration of specimens from the obstetrical series of the Hunterian Museum illustrating the anatomy of the placenta and William Hunter's discoveries relative to the nature of the decidua and the independence of the fœtal and maternal circulations The demonstration closed with an exhibition of the beautiful dissection of the gravid uterus in the fifth month which was figured in the portrait by Sir Joshua Reynolds, and which was of special interest as being from the case in the investigation of which William Hunter discovered the till then unrecognised condition of retroversion of the gravid uterus

FORFARSHIRE MEDICAL ASSOCIATION —A meeting of this society was held on May 3rd, Dr Mackie Whyte, Vice President, being in the chair —Professor Kynoch showed a Uterus removed by Vaginal Hysterectomy for cancer of the cervix —Dr Buist showed drawings of a Liver from a case of Acute Yellow Atrophy and of microscopic sections of it He then quoted statistics of cases in several hospitals of acute yellow atrophy and the relative frequency of its occurrence in cases of pregnancy which he considered was not necessarily a factor in this disease A case had been under his care which simulated acute yellow atrophy of the liver but proved to be toxæmia from obstruction —Dr Mackie Whyte read a paper on the cases of Chronic Tuberculous Peritonitis which had been under his care in the Dundee Royal Infirmary during the last five and a half years They were 11 in number, nine were dead, one was in a hopeless condition, and one had recovered completely The single case in which laparotomy had been performed had died and though most of the cases seemed unsuitable for operation when admitted still it was thought it might be more frequently tried Family tuberculosis was present in seven. In three cases there were marked pleuritic symptoms and in three there was old tuberculosis of the lungs —Mr Greig then continued his communication on Two Years in the Surgical Out-patient Room of the Infirmary In it he discussed the cases of kyphosis and scoliosis the relative frequency of both in the two sexes, the ages of occurrence, the varieties, and the treatment He pointed out the difficulty of treatment of these cases in the surgical out patient department and recommended that if the plaster-of Paris jacket be used it should be combined with the dorsal position as being likely to afford more support to the spine In the next place tuberculous disease of bones, osteo-myelitis, periostitis, and osteitis were considered Lupus was briefly mentioned, especially as regards the parts affected, the age, and sex Tuberculous adenitis was then referred to and the treatment briefly discussed Tuberculous arthritis, traumatic synovitis, and sprains were then spoken of, after which short details were given of the cases of rheumatic arthritis, osteo-arthritis, and several varieties of congenital deformities—e g, retained testis, cleft palate, and nævus

BRITISH LARYNGOLOGICAL, RHINOLOGICAL, AND OTOLOGICAL ASSOCIATION —A general meeting of this society was held on April 28th, Dr Middlemass Hunt, President, being in the chair —Mr Lennox Browne reported that some doubt having been expressed as to the malignant nature of the case of Laryngeal Epithelioma of at least two and a half years' duration exhibited by him at the last meeting, he had removed a portion of the growth and submitted it to Mr Wyatt Wingrave who reported that it was a "diffuse papilloma undergoing slow malignant transformation" Mr Wyatt Wingrave said there was a tendency for the cells to group themselves into nests He concluded that what was in the first instance a comparatively quiet papilloma was probably undergoing active change strongly suggestive of histological malignancy —The President described a case of Hysterical Aphonia which had lasted 11 years After a severe mental shock the patient had become mute and had remained so for three or four years, when she

began to whisper, and in the past two years had developed a deep rough voice, which the laryngoscope showed to be produced by vibration of the false vocal cords (taschenbandsprache) All methods of treatment were tried in vain, but the voice returned suddenly six months ago after exposure to great excitement and had remained normal ever since —Dr Abercrombie showed a case of Laryngeal Papilloma with Apparent Defect of the Posterior End of the Left Vocal Cord in a boy, aged nine years, the subject of nasal obstruction from hypertrophied tonsils and adenoid growths —Dr Dundas Grant showed a case of Asymmetry of the Frontal Sinus revealed by operation — Mr Chichele Nourse showed a case of Empyema of the Frontal Sinus treated through the Infundibulum —Dr Dundas Grant showed (1) two cases of Radical Operation for Chronic Suppurative Otitis, and (2) a case of Atresia of the Right External Auditory Meatus

Reviews and Notices of Books.

A Manual of Surgical Treatment. By W WATSON CHEYNE, M B Edin, F R C S Eng, F R S, Professor of Surgery in King's College, London, Surgeon to King's College Hospital, &c., and F F BURGHARD, M D M S Lond, F.R C S Eng, Teacher of Practical Surgery in King's College, London, Surgeon to King's College Hospital, &c. In Six Parts Part I London and Bombay Longmans, Green, and Co 1899 Pp 285 8vo Price 10*s* 6*d*

THE chief end of surgery is treatment However interesting pathology may be its importance is almost entirely dependent on the fact that it points out the directions which treatment must follow Of late years, however, there has been a tendency to magnify the office of pathology at the expense of treatment and indications this are to be observed in some text-books, where space devoted to the pathology and therapeutics of a disease does not correspond with their relative importance The vast increase, moreover, in all branches of surgery in recent years has made it necessary that in a text-book of the science the descriptions of treatment must be abbreviated if it be desired to keep the work within a reasonable size A real want, therefore, exists for a work in which the accounts of the treatment to be followed are sufficiently detailed to enable readers to conduct the treatment of a case, but in order to prevent the book assuming too great a size something must be omitted, and as numerous treatises exist which deal fully with the pathology of disease and say but little of the treatment, so the pathology may safely be omitted from a work which has to do primarily with treatment These observations indicate fairly exactly the scope of the work of which the first part lies before us It is intended to give full details of the treatment of surgical cases from the commencement to the termination of the illness, and the pathology and symptoms are only referred to in so far as is necessary for the appreciation of the principles of the treatment The authors have not attempted to describe all the methods of treatment which have been or even now are practised, but they have in the main described chiefly those methods which appear to them to be the best, but they refer also, though in less detail, to other methods which are recognised as valuable at the present day It is obviously difficult to express an opinion of a work of which we have had an opportunity of examining only one sixth part, but if the succeeding volumes equal the first there will be no two opinions as to the great practical value of this treatise

This first part contains the treatment of general surgical diseases, including Inflammation, Suppuration, Ulceration, Gangrene, Wounds and their Complications, Infective Diseases and Tumours, and the Administration of Anæsthetics We will take this last section first The chapter on anæsthetics has been contributed by Dr J F W Silk and it is most ably written, it is evidently based on a very wide personal experience of the administration of anæsthetics and it should prove of value, not only to those who act as anæsthetists, but also to all who have anything to do with operations and notably to the surgeon Especially useful are Dr Silk's remarks on the factors which determine the choice of an anæsthetic and he wisely points out that an anæsthetic may be perfectly safe in the hands of an administrator accustomed to its use and yet be highly dangerous when given by one who has had little previous experience of it The account of the treatment of the difficulties and dangers met with in anæsthesia is good and so also is the description of the various methods of producing locally absence of sensibility To only one statement in this chapter do we venture to take exception, on page 83 we are told that 150° F is "as hot as the hand can bear", a very simple experiment with a bath thermometer will show that 150° is a much higher temperature than most hands, at least, can bear

Inflammation and its Treatment are dealt with in Chapter I', and especially good is the account of the methods of general and local blood letting—therapeutic measures which are too much neglected at the present day, but it was surely hardly necessary to figure the spring scarificator, for it is practically never employed at the present time The subjects of Acute Suppuration and Ulceration occupy the next two chapters and in this connexion Thiersch's method of skin grafting is fully and carefully described The very good results which may be obtained by the employment of this method depend chiefly on small and apparently unimportant details and all these minutiæ of treatment are here to be found The authors classify gangrene as direct indirect, and specific It would probably be better to call the first variety "direct traumatic," for some of the specific forms are equally "direct" In the prevention of bedsores there is nothing better than a properly filled water bed, but much of its value depends on the bed being filled to the correct degree, and this point has not been forgotten, for the authors describe carefully the degree of fulness required,

An important chapter is that dealing with the Treatment of Wounds In this, after an account has been given of the value of cold as a hæmostatic, we are told that "almost equally efficacious in arresting bleeding is heat" We should certainly feel inclined to place heat far in advance of cold as a hæmostatic, for the influence of cold in most cases passes off rapidly after a dressing has been applied, while the effect of heat, from 110° F to 115°, is much more permanent A useful account of saline transfusion for hæmorrhage is given and we coincide with the authors in the opinion that a description of the methods of transfusion of blood either pure or defibrinated, would take up space which might be more usefully employed otherwise We think, however, that the authors are under a misapprehension in saying that in the transfusion of blood "the red blood corpuscles introduced soon die", this only occurs when the blood of one animal is introduced into an animal of a different species and is probably dependent on the difference in the composition of the liquor sanguinis in the two cases

It might have been pointed out that the entry of air into veins appears to be less common nowadays than formerly and this is in all probability due to the use of anæsthetics by which the vigour of the respiratory movements is restrained and the systemic veins are usually overfilled, so that if a vein in the "dangerous area" be wounded blood is more likely to flow from the vessel than air to enter it The chapter on the treatment of wounds is very good and we need only mention specially the description of the button hole suture, it often happens that those who are not in the habit of employing this stitch experience some difficulty in finishing it off Three methods in which this may be done

are figured here, the neatest is that in which at the last stitch the needle is introduced in a direction opposite to the other stitches

The septic complications of wounds are well described and an interesting theory to explain the action of nitrate of silver in limiting the spread of erysipelas is given, it is suggested that the caustic excites a leucocytosis in the part which by the phagocytic action of its component corpuscles acts as a barrier to the onward progress of the micrococcus A brief but very lucid account is given of the treatment of syphilis and a description of the soft sore follows It is stated that the chancroid "generally occurs on the prepuce or glans penis," from which it might be gathered that it is rare on the vulva, the statement is of course true if the words "in the male" be inserted.

Chapters on the General Treatment of Tuberculosis and of Tumours, Innocent and Malignant, follow These refer only to the general principles of treatment and more detailed accounts will be given with the surgery of the special organs and tissues We have derived much pleasure from the perusal of this part and shall look forward with interest to the appearance of the succeeding sections of the work The most marked characteristic of the book is the essentially practical nature of the descriptions. The authors are to be congratulated on the successful commencement of the first portion of an arduous task.

Traumatic Separation of the Epiphyses By JOHN POLAND, F R C S Eng With 337 Illustrations and Skiagrams London Smith Elder, and Co. 1898 Royal 8vo Pp 926. Price £2 12s 6d

THE old Greek saying that a large book is a large evil is not universally applicable, for the book before us is certainly great, as it extends to nearly 1000 pages, yet it is very far from being an evil for it is a very valuable contribution to an important department of surgery There is, perhaps, no more frequent error of diagnosis than the mistaking the separation of an epiphysis for a fracture, and, indeed, this mistake is very pardonable, for the amount of information on the subject which is to be found in most of the text-books of surgery is very small Yet the condition is by no means rare, for Mr Poland has collected notes of more than 700 cases

The first chapter deals with the history of the subject, and from it we learn that a sentence in Hippocrates may refer to this lesion, for in speaking of dislocation of the wrist he says that the epiphysis is sometimes displaced but what was his exact meaning cannot now be determined A much more definite reference occurs in a book by Realdus Colombus in 1559 and from that time to the present the references in surgical literature increase in frequency and the citations from writers of the present century alone fill several pages, but curiously in 1850 Dr A. Coulon of Paris in a treatise on fractures in children, denied the existence of these injuries and many other writers, while not venturing to deny the occurrence of these lesions, have considered them to be so rare that they are of little practical importance. During the last 20 years it has gradually been acknowledged that the injury is by no means rare and Cartillet in 1891 considered that 20 per cent of all fractures in children were really cases of separation or an epiphysis

The next chapter, on the Anatomy of the Epiphysis is extremely good and it is illustrated by a series of 19 skiagrams taken by Mr William Webster, they show the appearances of the hand and wrist at various ages from the end of the first year to the seventeenth year

With regard to the etiology the author considers that the causes producing these traumatic separations are practically the same as those of fracture but as a rule they are more severe, although in some cases as in hyper-extension of the knee, the force required is really less than would be needed for fracture As to the age at which these injuries occur it was formerly thought that they were most common in infancy or in the first few years of childhood, but Mr Poland's statistics show that from 11 or 12 up to 18 years of age these separations are most frequently met with and in great part this is due to the fact that during this period children are much more exposed to severe injuries than at an earlier age. To be able to diagnose the separation of an epiphysis it is necessary to know the dates at which the epiphyses appear and join and these are clearly given in two chronological tables As to the relative frequency of the different separations we learn from a table which the author gives that the lower epiphysis of the femur is the most frequently separated and that after it come the upper epiphysis of the humerus and the lower epiphysis of the radius All the epiphyses which are liable to become separated are then described in order and in each case the diagnosis, treatment, and prognosis are carefully described In many cases illustrations and skiagrams are given and they add greatly to the value of the descriptions

On the whole the prognosis is good in these injuries, one of the most troublesome results is arrest of growth of the affected bone and this is especially harmful in the forearm or the leg, where the unequal growth of the two bones leads to distortion Ankylosis also is not rare as these injuries in the limbs are close to joints

With each quotation the author gives the reference to the book from which he has taken it, a practice which should be more widely followed An elaborate index of names referred to is given and there is an equally complete index of subjects The printing and paper of the book could not be better In conclusion, we may say that the work may be considered a complete exposition of the subject of which it treats and that for many years to come it will be, not only in this country but abroad also the standard work on traumatic separation of the epiphyses

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JOURNALS

Medical Chronicle —The March number completed vol x. of its series and the April number marks the commencement of vol. i. of the third series Simultaneously the duties of editor are taken over by Dr R T Williamson, assistant to the professor of medicine, Owens College, with Dr F J H Coutts as sub-editor The journal is produced under the direction of a number of guarantors of whom Professor D J Leech is chairman and Professor Sinclair vice-chairman The new publishers are Messrs Sherratt and Hughes, 27, St Ann street, Manchester and the familiar reddish brown cover has given place to a light blue one The annual subscription remains 12s 6d as before The original articles in the April number are (1) by Mr E Stanmore Bishop on the Sealing of Operative Wounds about the Abdomen *versus* Treatment by Dressing, (2) by Dr J S. Bury on a case of Multiple Peripheral Neuritis ending in Symmetrical Gangrene, and (3) by Professor Delepine on the Effects of the Pollution of Water supplies

Edinburgh Medical Journal —In the May number Dr William Osler of Baltimore describes three cases of Gastro-intestinal Hæmorrhage occurring in patients who suffered from primary chronic enlargement of the spleen with anæmia the condition called splenic anæmia by Griesinger The bleedings were very profuse and occurred from time to time during a period of from nine to 12 years while in the intervals the patients regained their flesh and strength and were able to carry on their occupations Dr Osler agrees with Sir Thomas Watson in considering the etiology of the hæmorrhage to be mechanical congestion Dr A. L. Gillespie relates his impressions of a Visit to the Falkenstein

Sanatorium for Phthisical Patients—There are four other original articles

Dublin Journal of Medical Science—In the opening article of the May number Dr H C Drury draws a dismal picture of the Prevalence and Effects of Morphinomania or the Uncontrollable Craving for Morphia Administered by Subcutaneous Injection Dr Drury discusses the treatment of morphinomania at some length, giving the preference to gradual reduction of the drug, and mentioning the use of atropine and permanganate of potassium as partial antidotes

Analytical Records
FROM
THE LANCET LABORATORY.

TABLOIDS CONTAINING ARTIFICIAL EFFERVESCENT MINERAL WATER SALTS

(BURROUGHS, WELLCOME, AND CO. SNOW HILL-BUILDINGS E C)

WE have examined two types of this useful application of the tabloid—namely, the tabloid representing artificial Carlsbad salt and the tabloid representing artificial Vichy salt In addition to the salts which are identical with those of the respective springs indicated the tabloids contain ingredients which on interaction in water give rise to an agreeable effervescence The Carlsbad tabloid contained the chief active constituent of this celebrated spring while the Vichy tabloid contained besides alkaline salts some magnesium salts In the same way tabloids are prepared representing Kissingen, Seltzer, and Vichy with lithium

VERNISOL.

(JOHN BELL AND CO 225, OXFORD-STREET W)

Vernisol is described as a skin varnish with the advantage of being soluble in water On rubbing the preparation uniformly on the skin a clean protective film remains after a short time According to our examination the yield of film is about one sixth of the total substance Vernisol is yellowish brown in colour and has a jelly like consistence It possesses the desiderata of a skin varnish—viz, is tenacious, pleasant to use, free from irritants, and may be easily removed by ordinary washing Vernisol is contained in collapsible tubes and is combined with all the well known antiseptics

ANTI RHEUMATIC BREAD

(JOHN LAW AND CO. 219 STIRLING ROAD GLASGOW)

The makers of this bread evidently feel justified in calling it "anti rheumatic" on account of the fact that it contains alkaline potash salts and salicylate of soda We do not approve of the administration of drugs in food in this manner In the present instance it is quite possible that the salicylate in arresting the digestive processes would set up dyspepsia We must allow that the bread is ingeniously prepared, its taste is good and nutty, its texture satisfactory, and the fact that drugs are present would barely be suspected We note that the bread "may be had from any first-class grocer in the city Assuming that this should prove a satisfactory way of administering salicylate of soda, under no circumstances should it be tried apart from medical advice The bread gives a strong violet colour with a few drops of perchloride of iron, while a drop of "alkaline indicator" gives a marked positive reaction

PHENALGIN

(THE ETYA CHEMICAL CO 313, WEST STREET NEW YORK LONDON AGENCY: L. J REID, 11, DUNEDIN HOUSE, BASINGHALL-STREET E.C)

Phenalgin is, according to our analysis, a combination of a well known coal tar derivative—an antipyretic and analgesic—with carbonate of soda and ammonia This class of compound is often intended for popular use in headache and other common maladies The coal tar antipyretics, such as antipyrin, antifebrin, and phenacetin, are dangerous in lay hands The physician knows when these substances are likely to be of service and is perfectly well aware how to combine them for administration. We strongly deprecate the indiscriminate sale of these coal tar derivatives combined with alkalies under proprietary names as certain remedies for various common complaints

ESVACH WATER.

(DAVY HILL AND SON YATES AND HICKS 64, PARK STREET, SOUTHWARK S E.)

This is not a natural mineral water, though its name might lead to that impression. Most natural mineral waters of the purgative saline class contain that almost inevitable constituent of natural waters, lime, but Esvach water would appear on our analysis to be free from lime salts. What it does contain according to our analysis will be seen from the following figures magnesium sulphate, 24 65 grammes per litre, sodium sulphate, 11 36 grammes, and carbonate of soda, 6 57 grammes The total mineral contents thus amount to 42 58 grammes per litre The specific gravity was ascertained to be 1042 5 The therapeutics of Esvach water will be understood from the results of this analysis

DAHL'S STERILISED DOUBLE CREAM.

(DAHL MILK CO DRAMMEN, NORWAY AND HERBERT FRANCIS AND CO., 8, ARTHUR STREET WEST E.C)

The method employed for the sterilisation of this cream must be regarded as quite satisfactory since on opening the tin not only was the contained cream in perfectly sound condition, but it possessed a flavour closely approaching that of the fresh article It was practically free from that "scalded" flavour which characterises most tinned dairy products On analysis the following results were obtained water, 62 64 per cent, fat, 30 00 per cent., mineral matter, 0 45 per cent, milk sugar and proteids, 6·91 per cent The cream is of excellent quality and free from preservatives In some instances cream might suitably and with advantage replace cod liver oil as a special food and therapeutic agent

ÉVIAN GROTTES MINERAL WATER.

(RICHARD DAVIS 20 MADDOX STREET REGENT-STREET W)

This water is derived from Évian les Bains, where occurs a very interesting and remarkable group of caves or grottoes. It is well suited for table use and adapted in some cases for definite treatment since it is mildly alkaline but free from an excessive and what often proves to be objectionable amount of salts The only mineral ingredient of importance according to our analysis is carbonate of soda, of which we found 0 37 gramme per litre There is but a trace of common salt present The total residue obtained on evaporation amounted to 0 45 gramme per litre The water is free from saline taste but not insipid We obtained no evidence of organic impurity

(1) ACOINE AND (2) HYRGOLUM

(BURGOYNE, BURBIDGES AND CO 12 AND 16, COLEMAN STREET E.C.)

Acoine is described as a new local anæsthetic and rejoices in the name "diparanisyl monoparaphenetyl guanidine hydrochlorate" We prefer the abbreviated name, having once satisfied ourselves that the acoines are alkyl-oxyphenylic guanidines and that they would appear to offer some advantages over cocaine in producing anæsthesia. It is said, for example, that the acoines do not give rise to the symptoms of poisoning sometimes caused by cocaine. An important paper detailing many experiments on the anæsthetic properties of acoine appears in Part I of the *Therapeutische Monatshefte*, 1899. The results are interesting, tending to show that in acoine we possess a new substance for producing satisfactory local anæsthesia. Hyrgolum is described as a new allotropic form of metallic mercury

From a few experiments which we have made with it we cannot allow that it is strictly speaking an allotropic form of mercury Thus on heating it splits up into mercury and ammonia gas It is a hard, brittle solid, somewhat resembling the black scales so often seen in the forge of a smithy

(1) ANTITUSSIN (2) FLUOR RHEUMIN AND (3) EPIDERMIN
(T CHRISTY AND CO 25, LIME STREET E.C)

These three compounds are derived di fluor-di phenyls The formula for di fluor-di phenyl is $C_6H_4 C_6H_4 F_2$ and is obtained by acting upon certain phenyl compounds with concentrated hydrofluoric acid Antitussin is an ointment containing di fluor-di phenyl and is described as "a certain cure for whooping cough and diseases of the throat and neck," the ointment to be applied very energetically Fluor rheumin is another ointment containing as a basis fluor phenetol di fluor-di phenyl and is said to give marked relief in rheumatism, lumbago and influenza Epidermin is a related compound but with xylol in the molecule Contained in an ointment it is said to serve as a useful antiseptic in the treatment of unhealthy suppurations as well as of burns Fluorine compounds have been known for some time as powerful antiseptics and their combination with phenyl groups would appear to afford a series of medicated unguents which deserve attention

New Inventions.

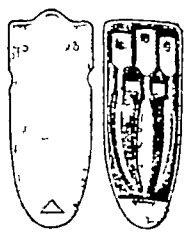
ASEPTIC INSTRUMENTS

AT the present day most surgeons will agree that any instrument which is to be employed in a surgical operation should be capable of being boiled and this is as necessary for pocket instruments as for those used in the more important operations The figures illustrate a very neat arrangement for a portable knife which is constructed entirely of metal and may therefore be boiled The handle encloses the blade (Fig 1) and when the handle is opened the blade is placed

FIG 1

in position and then the handle fixes it firmly by an ingenious spring so that there is no fear of its closing unexpectedly The blade is interchangeable with three others which are kept in a metal case (Fig 2) and these blades include all the

FIG 2



forms which are likely to be required The knives are made by J Albert Schmidt, Solingen, whose agent in London is Mr W S Oswell, 12, Lime street, London, E C

A MIDWIFERY SURGICAL CLAMP

IN the old method of dividing the umbilical cord the accoucheur after tying the first thread pressed the blood in the vessels some distance along the cord which was then held by an assistant until the second thread was tied, the object being to avoid the escape of blood on to the bedclothes This part of the accoucheur's work may, however, be accomplished more conveniently by making use of a clamp which I have designed and which is represented open in Fig 1 and closed in Fig 2, for it by the same move-

FIG 1

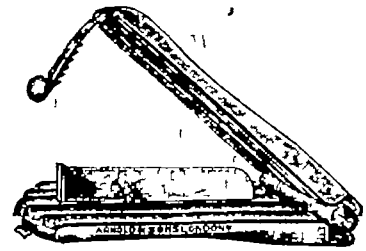
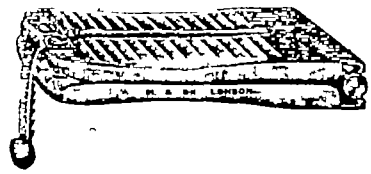


FIG 2



ment cuts the cord and compresses both the cut ends, thereby supplying the place of scissors and ligatures The clamp having been opened, the cord when it has ceased to pulsate is placed between the blades resting on the plain side, the knifed edge is then pressed firmly down and retained in position by the catch The clamp is removed a few seconds after application and if the accoucheur is afraid of hæmorrhage (although French authorities say there is no need for ligatures) he can tie the cord on either side of the clamp before releasing the catch The instrument is neat and easy to use Messrs Arnold and Sons, London, are the makers EDWARD MAGENNIS, M D R U I

Lurgan Ireland

PLYMOUTH ASYLUM — At a meeting of the Plymouth Town Council held on May 8th the report for 1898 of the Visiting Committee of the Plymouth Borough Asylum at Blackadown was presented This stated that the result of the recent controversy between the guardians and the council with regard to the weekly rate charged for pauper patients from Plymouth was that the council in future would pay £1000 a year extra and the guardians £1000 per annum less than formerly The weekly maintenance rate of patients had been reduced from 12*s* 1*d* to 11*s* 2*d*

DIPHTHERIA IN LONDON—Alike as regards amount, mortality, and relative fatality diphtheria in London in the four weeks ended on April 22nd showed great decline as compared with the like period ended on March 25th In the earlier period the total of notified cases of the disease was 791, or 198 per week, whilst in the April period the total was only 645 and the weekly average 161 cases In both all sanitary districts save two were invaded, but whereas in March there were four districts with upwards of 50 notified cases each and 240 in all there was only one such district in April, while other five areas had only a total of eight cases in all The weekly average of 46 deaths from diphtheria in the March period amounting to 166 gave place to an average of 28 in April and a total of 114 deaths The records of the several weeks in this later period showed 31 deaths (or six below the corrected decennial average), 34 (equal to the average), 20 (being 16 below the average) and 29 (or six below the average) Had the corrected averages for the corresponding four weeks of 1889-98 been maintained the actual 114 deaths would have been 142 The case mortality yielded was 17 7 per cent in place of the 20 0 per cent of the March period In the outer circle also there was a falling off in the number of deaths from diphtheria the 58 of the earlier period of which 23 were in West Ham registration district, being replaced by 44, of which 19 were in that particular area

THE LANCET.

LONDON SATURDAY, MAY 20, 1899

THE success of the Hospital Saturday Fund in Birmingham is a matter on which its promoters may be heartily congratulated Last year they raised the handsome sum of £17,662 In addition to £10,000 as a donation to the medical charities they devoted £5000 to the support of convalescent homes, £100 to the District Nursing Society, and £250 to the provision of surgical appliances These are very substantial contributions which are creditable to the working classes of Birmingham, but the sum is not one whit greater than should be raised for the purpose by the working men of one of the most prosperous and thriving provincial towns in England with a population of nearly half million The benefits of the medical charities are monopolised almost entirely by the working classes and it is ut fit that they should realise their obligations and give generously to institutions which provide sick beds and the best skill and nursing for the unfortunate among their number or their families when overtaken by exceptional disease or accident The sum contributed to the hospitals of Birmingham by the Hospital Saturday Fund is probably not a fourth of that which is required to carry them on as charitable institutions, but the whole sum raised is not far short of that contributed to the Hospital Saturday Fund of London with its enormous population, showing how much more complete is the organisation in Birmingham than it is in the metropolis

But while we have always been ready to recognise the merits of the working classes of Birmingham and of those who lead them we have occasionally found it necessary to remind them that they were dealing with charities under public management, founded and supported by the benevolent of many generations and created for limited and specific purposes We have noticed with regret a disposition to try experiments with these institutions and to turn them to purposes for which they were never intended Not long ago there was an attempt to ignore their essentially charitable character and to insist that the working classes by their contributions acquired a sort of right to their benefits in respect of the ordinary ailments and diseases of life—in other words, to insist that by their contributions they were paying for that ordinary medical attendance which has always been a matter for every family to arrange and pay for privately, either by engaging the services of a general practitioner practising privately or as members of a friendly society, club, or the like The fallacy that charitable medical institutions are to be used for ordinary disease is one which the working man would quickly perceive if the same notion were held by the rich man who contributes to hospitals What would the working man think of a well-to-do person contributing five guineas a year and thereby claiming to have himself, his family, and his servants attended by the hospital staff and when necessary received into the beds of the hospital?

But the latest heresy of the working classes of Birmingham has reference to medical practice outside hospitals altogether It is a proposal to establish an institute where a consultant's opinion is to be obtained for the modest fee of 10*s* 6*d* The scheme contemplates the hiring of consulting rooms and the engagement of consultants It is proposed to begin tentatively with two—a "physician" and a "surgeon," each to have a salary of £500 a year The experiment is expected "to yield a considerable profit," for in all these schemes for exploiting the medical profession, and especially the younger and more needy members of it, there is a business element to be detected But provision is made for the experiment proving to be a financial failure In that case two-thirds of the loss have to be met by the Hospital Saturday Fund and one-third by Mr ARTHUR CHAMBERLAIN who has the credit—rather would we say the responsibility—of this most questionable innovation The chance of loss, however, is regarded by Mr CHAMBERLAIN and his colleagues as very remote, "considering the present condition of the medical profession and the hospitals in the city" Exactly so All sorts of experiments are tried with "the hospitals in the city", enormous numbers are treated with very inadequate inquiry into their fitness for such relief and the medical profession is driven to all sorts of devices to compete with the abused charities Now advantage is to be taken of this state of matters to degrade the system of consultation. We regret that the working classes of Birmingham should be thus misled by a gentleman who must know that "consultants" are not ready made and that the scheme is calculated to tempt two—no doubt promising—young members of the profession to place themselves in a very ungracious and undignified position They will enter into competition not so much with consultants as with general practitioners of all ranks. They will be put forward—practically they will be advertised very loudly—as superior persons who have been persuaded to take an inferior fee, and the profits which they are expected to make will be used, not for their benefit or for the benefit of the profession, but for the glorification of the Birmingham Hospital Saturday Fund and to enable its members to try other experiments with the profession and its charities

Dr SAUNDBY, both at the meeting of constituents of the Hospital Saturday Fund and in an able letter to the *Birmingham Daily Post*, has entered a very proper protest against this scheme Surely the least its promoters should have done before committing themselves to it by a large majority was to have taken the medical profession into consideration Consultation is a very worthless thing unless it represents experience and reputation and the confidence of the ordinary medical attendant We see no case at all for creating such a nondescript innovation as this consulting institute to be officered presumably by two young men at a fixed salary Mr ARTHUR CHAMBERLAIN, although doubtless he has no such intention, is doing his best to lower the status of the whole medical profession by such schemes and he may be assured of this, that in so treating the profession he is doing an injury to the tone and standard of medical practice which will in turn injure the working classes more than his pet scheme will benefit them When real emergencies arise the deserving poor can

always obtain at hospitals the services of consultants, and it is obvious that anything which estranges the medical profession as a whole is not in the long run likely to work well for any class of the community. We trust that this fantastic scheme will be abandoned. At any rate, the medical profession should meet in force and utter a dignified protest against such interference with its duties.

THE Leicester guardians have determined to refrain from appointing a vaccination officer to carry out the new Act and they have made their refusal the occasion of preparing and circulating a lengthy memorial on vaccination in Leicester addressed to the Local Government Board. The document is a careful and elaborate attempt to obscure the question at issue by ignoring important facts and assuming the identity of things which are essentially different. In the end, indeed, it would almost seem as if the guardians had succeeded in thoroughly muddling their own minds by their own sophistications, for they conclude their memorial by expressing regret that the Vaccination Commission's "unanimous recommendation to abolish compulsion was not adopted and embodied in the Act of 1898." Needless to say everyone excepting the Leicester guardians knows that rightly or wrongly compulsory vaccination has been abolished by the conscience clause and Leicester's power of self-deception as regards all that relates to this subject could receive no better illustration than is to be found in the fact that their elected representatives are now in the ridiculous position of publicly bewailing that this abolition has not taken place. They quote from Mr BALFOUR the view "that where a parent has clearly proved that he has an honest, decided, and strong objection in the interests of his own child to vaccination it is useless to attempt to coerce him," but from beginning to end of the document they argue as if prosecutions under the Act of 1898 were not to be distinguished in the important matter of the conscience clause from prosecutions under the previous Vaccination Acts. The obfuscation of the guardians reaches its acme in their quotation from Lord SALISBURY'S speech in the Upper House when, in advocacy of the conscience clause, he said to the Lords "You will be able to induce local authorities to work with you instead of against you." That of all the local authorities in this country the Leicester body should be the one to quote these words in this connexion indicates nothing short of a sublimity either of impudence or stupidity. The Vaccination Commission did have its recommendation given effect to, Lord SALISBURY did persuade the Lords to yield, the conscience clause was granted, and now it is the Leicester local authority which refuses "to work with instead of against" the Government, and which will not fulfil its statutory duty of appointing a vaccination officer even though compulsory vaccination is abolished by means of the conscience clause.

It is hardly necessary to point out that prosecutions under the Act of 1898 will be instituted only against persons who have refused to accept the relief offered by Section 2 and that in effect the prosecution will be not for neglect of vaccination but for neglect to follow the course laid down by Parliament for avoidance of penalties by those who object to vaccination. It will be recollected that the Leicester anti-vaccinationists have from the first made a boast of their determination to defy Parliament even in the matter of the conscience clause. They held a public meeting in the Market Place at which their leaders urged them to this course and, according to the statistics of the guardians, of 80,000 juveniles to whom the new law would apply conscientious objection has been registered with regard to only 10,000. And Leicester having thus thrown down the gauntlet to Government and Parliament now begs of them not to take it up. "Why," say the memorialists, "why disturb the existing peaceful state of things?" for "numerous prosecutions would undoubtedly excite widespread sympathy and indignation, thus bringing the administration of the law into contempt"—as if the extensive liability to prosecution had not been purposely created, and as if the yielding of the Government would not at once be triumphantly hailed by the guardians as evidence of the success of their efforts to bring the administration of the law into the contempt which they pretend to deprecate.

There can be no sympathy with the Leicester guardians and their extraordinary manifesto and there can be no doubt that the Government will persevere in its determination to have a vaccination officer appointed. Not nearly all of the 70,000 uncertified children belong to parents possessed of any deep-rooted objection to vaccination and when mere indifference ceases to have its full effect—as it will cease after the appointment of an officer—there may be considerable reduction in the numbers independently of any prosecutions. It is not inconceivable, indeed that the fear of this result has something to do with the anxiety of the guardians not to appoint an officer. But in Leicester more perhaps than anywhere else in the kingdom anti-vaccination has become a kind of fashion, and many of the inhabitants seem to be imbued with a foolish pride in the mythical Leicester method of controlling small-pox. This being so the Government will very likely find themselves confronted in the end with a serious difficulty. If notwithstanding the work of the vaccination officer many thousands of children the accumulation of past arrears, remain unvaccinated—the time allowed for their certification under the conscience clause having expired before the end of 1898—will the Local Government Board undertake the task of wholesale prosecution which will be necessary if the new Act is to be maintained in full operation? If it is impossible to sympathise with the Leicester guardians in their alleged difficulty it will not be easy to have much sympathy with the Government in theirs, for in both cases the troubles will in great measure have been created by those who suffer from them. Had last year's Act been reasonably inclusive and complete had it contained in particular a provision for systematic vaccination or revaccination of school-children, then it might have been possible to deal with the arrears in yearly instalments as the age for revaccination came round. Obviously under the present Act these arrears constitute a much greater difficulty than does the routine duty of attending to infants unvaccinated and unregistered at four months of age. Even yet the Government could find an eleventh hour salvation by passing a Re-vaccination Bill, but if it

persists in ignoring alike its own public promises and the best course open to it to get over a serious difficulty in the administration of the half-measure of last year, then, we repeat, it will deserve little more sympathy than do the Leicester guardians

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IN THE LANCET of April 22nd we gave an epitome of what is known concerning the incidence of fatal tuberculosis on the population of this country, distinguishing its various forms and showing the mortality for which it has been responsible during successive periods of the last half-century Next in importance to tuberculosis in the list of constitutional diseases stands cancer which, on account of its rapidly increasing fatality in recent years, has awakened an amount of general interest scarcely less than that which rightly attaches to the still excessive prevalence of tuberculous disease The national records tell us that for some years past cancer has contributed more largely to the death roll than any other single disease with the exception of bronchitis, pulmonary consumption, and pneumonia We have therefore determined to deal in the present article with the incidence of malignant disease on the population of England and Wales, treating the subject as nearly as possible on similar lines to those followed in the case of tuberculosis, our object being to furnish the readers of THE LANCET with a complete summary of the history of this malady, derived, as in the former case, from the National Registry at Somerset House

In the subjoined table will be found the mean annual rate of cancer mortality at certain ages in both sexes for each of the four decennia from 1851 to 1890 and also the mean rate for the seven years ending with 1897, which is the latest year for which abstracts are available

Cancer (Malignant Disease) in England and Wales Mortality at Specified Ages in several Periods from 1851 to 1897

Ages	Deaths in 1,000 000 living				
	1851–60	1861–70	1871–80	1881–90	1891–97
Males					
All ages	195	242	312	430	571
Under 5 years	21	13	13	21	32
5 to 10	10	8	7	11	18
10 to 15	8	7	8	12	18
15 to 20	16	18	16	23	32
20 to 25	27	26	27	37	49
25 to 35	63	60	70	79	98
35 to 45	174	204	239	297	388
45 to 55	422	536	705	998	1233
55 to 65	931	1201	1588	2299	3050
65 to 75	1504	1862	2599	3742	4977
Above 75	1749	2258	2985	3914	5432
Females					
All ages	434	519	617	739	882
Under 5 years	23	13	12	19	26
5 to 10	9	7	7	9	12
10 to 15	9	7	7	10	12
15 to 20	18	16	14	18	25
20 to 25	30	32	26	33	39
25 to 35	141	161	173	172	180
35 to 45	592	669	790	852	918
45 to 55	1278	1530	1760	2042	2528
55 to 65	1853	2291	2753	3368	4045
65 to 75	2351	2791	3512	4506	5555
Above 75	2341	2786	3513	4578	6135

The earliest accessible records of mortality are those relating to the 10 years 1851–60 In that decade cancer was fatal, on the average, to 317 persons annually out of each 1,000,000 of the population The table shows that during this period cancer claimed more than twice as many victims among females as it did among males, and ever since that period the disease has shown a similar tendency although the contrast has been less strongly marked. It will therefore be expedient to consider separately the mortality of the two sexes Taking the five groups of years consecutively we note that cancer mortality among males was equal to 195 per 1,000,000 living in the first period, 242 in the second, 312 in the third, 430 in the fourth, and 571 in the last period Among females the rates per 1,000,000 were 434, 519, 617, 739, and 882 respectively, thus the mortality in both sexes showed a marked and progressive increase from period to period If, therefore, the correctness of the rates be assumed without question, it would appear that within rather less than half a century the fatality of malignant disease in both sexes has at least doubled. There are good grounds, however, for the belief that the increase shown by the tables is not wholly real Dr OGLE, for example, writing in 1885 on this subject puts the case thus "There can be very little doubt that a considerable part in this apparent increase is simply due to improved diagnosis and more careful statement of cause on the part of medical men Year by year the number of deaths ascribed to tumour, abdominal disease, or other similarly imperfectly stated causes has been undergoing diminution, and there has been of course a corresponding addition to the mortality under the more definite headings Moreover, the increase of mortality from cancer has been much greater among males than among females, the rate for males having risen 62 per cent in 20 years, while the rate for females has only risen 43 per cent Now, were the rise not merely apparent but real there would seem no reason why the male sex should have suffered more than the female, whereas the difference is readily intelligible on the hypothesis that the rise has been in great measure only apparent and due to better diagnosis. For the cancerous affections of males are in much larger proportion internal or inaccessible than are those of females and consequently are more difficult of recognition, so that any improvement in medical diagnosis would add more to the male than to the female reckoning" Again, Dr TATHAM, writing 10 years later—namely, in 1895—not only confirms the opinion of his predecessor but adduces fresh evidence to show that the increase referred to has been even more rapid since 1885 than in previous years He has, however, drawn attention to the fact that although in recent years the recorded rates have been corrected in an opposite direction, as we shall presently show, nevertheless the increase still continues unchecked Most of our readers will remember that ever since the year 1887 a system of inquiry has been in vogue at Somerset House, of which the object is to secure greater accuracy in the classification of such deaths as are inaccurately described in the medical certificates The answers to these inquiries have been so useful as to lead to the transference of many hundreds of ill defined deaths to one or other of the sections under the heading 'Malignant Disease" and to increase proportionately the recorded mortality from this malady Compensation for this change is, of course, required and this has been duly

ried out, nevertheless, after making every possible owance it would appear to be unsafe to compute the ncer mortality in the seven years 1891–97 at less an 551 per 1,000,000 for males and 863 per 1,000,000 r females These rates correspond to an average nual increase of 2 9 per cent. and 1 8 per cent spectively as compared with the mortality in 1861–70 ur table shows that during the first 25 years of life e mortality from malignant disease is insignificant. is in the period of maturity, and especially in that of ecline, that cancer claims the greater number of its victims The table further shows that the rate of increase in recent s compared with earlier years has been by no means niform at the several stages of life Among men aged from 35 to 45 years, for example, the rate of increase has been equal to 89 per cent, whilst among females at the same age the increase has not exceeded 37 per cent. At the next succeeding age group—namely, that from 45 to 55 years—the rate of increase has been 139 and 52 per cent respectively, and at the age from 65 to 75 years it has been 167 and 99 per cent At ages above 75 years, however, the difference in the rate of increase has not exceeded 21 per cent

In the last report of the Registrar General we are glad to notice a table which gives the means of estimating the relative frequency with which malignant disease attacks various parts or organs of the body Malignant disease in the aggregate is known to be more prevalent among women than among men, but it appears that the excess is largely due to the fact that the female generative and mammary organs are exceptionally liable to become affected If the deaths from disease of the ovaries, uterus, and breast be subtracted from the total cancer mortality the remaining deaths will give a mortality for females considerably lower than the male rate In the year 1897, for example, the male deaths from cancer, less the deaths due to disease of the generative and mammary organs, gave a death rate equal to 625 per 1,000,000 living, whilst the female death rate similarly calculated did not exceed 551 per 1,000,000 In addition to cancer of these organs malignant affections of the liver peritoneum, intestine, kidney, and pelvis are exceptionally frequent among women, but men are more liable than women to cancerous disease of the larynx, trachea and lungs, and likewise of the mouth, tongue, throat, and œsophagus, as well as of the jaw, face, lip, and neck and of the bladder and urethra. Of the 24 443 deaths referred to malignant disease during the year 1897 scirrhus accounted for 751, epithelioma for 1288, and sarcoma for 1485, while the remaining deaths were returned as from cancer or malignant disease simply

It is evident that the mortality in a given place from cancer is largely dependent on the proportion of persons under and over middle age in the population, since the mortality from this disease is mainly confined to persons over 35 years of age The mean death rate from cancer during the last completed decennium per million persons living at all ages ranged from 440 in Durham, 475 in Staffordshire, 477 in Lancashire 482 in Derbyshire and in Monmouthshire and 501 in South Wales to 716 in Norfolk, 727 in Sussex, 733 in North Wales, 740 in Devonshire, 789 in Cambridgeshire, and 916 in Huntingdonshire, the average rate for the whole of England and Wales being 589 per 1,000,000

Annotations.

"Ne quid nimis."

IS THERE A RELATION BETWEEN THE INCREASE OF TYPHOID FEVER IN LONDON AND THE INCREASE OF ORGANIC MATTER IN THE WATER-SUPPLY?

THIS question, which has been raised recently by Dr Corfield, deserves very serious attention In a special report to the parish of St George, Hanover square, he some time ago pointed out "that the exceptional prevalence of enteric fever in London during November, December and January, which are not the months for the seasonal prevalence of this disease, occurs in the very months in which London is supplied with water which contains 'an excess of organic matter'" Dr Corfield bases his contention on the statement contained in the report of Sir William Crookes and Professor Dewar "that all river-derived supplies have a period of minimum and maximum amount of organic matter during the course of the year The maximum generally occurs in Thames water during the winter months and the minimum during the summer" This maximum is what Sir William Crookes and Professor Dewar describe as "an excess of organic matter" To this these experts attach no significance, for "it is common knowledge that if any such disease as enteric fever originates through a contaminated water-supply it is not the *amount* of organic matter but its *nature* that is the dangerous factor and this must be the presence of the specific living germ characteristic of the disease No one has alleged that Thames water which has undergone storage and filtration similar to that of the London supply contains any such pathogenic organisms" Against this Dr Corfield quotes the experience of Sir Edward Frankland who has found an excessive number of organisms again and again in filtered Thames water, while Dr Parkes and Dr S Rideal have more recently found the bacillus coli communis passing in various numbers through the filter beds of the Chelsea Waterworks Company As to the bacillus of enteric fever it has rarely, Dr Corfield points out, if ever been found in any water supply, and on the occasion of the Maidstone epidemic Dr Washbourn said in his report that no importance can be attached to the failure to discover the typhoid bacillus in water suspected of being the cause of an epidemic of typhoid fever The organisms which were found by Dr Sims Woodhead and Dr Washbourn in the Maidstone water were of similar kinds to those found by Dr Parkes and Dr Rideal in the waters supplied to Chelsea. It seems to us that Dr Corfield has raised a very serious question, and his contention on the face of it appears to be supported by what he regards as a remarkable coincidence, that he was able last month to report that the number of cases of typhoid fever in London had very considerably diminished and the death rate from it gone down to its normal amount as soon as the water-supply had ceased to show the signs of contamination to which he has drawn attention

THE HOME FOR THE UNIVERSITY OF LONDON.

IT has for some time been quite understood that the Government intended to take over the present premises of the University of London to utilise them for its own purposes and that the reconstituted University would have to

find another home The present premises are much too cramped and confined and rooms have had to be sought elsewhere for mere examination purposes alone University College has offered the use of its buildings and site in Gower street, but the acceptance of this offer, even if the site and buildings were suitable, which is very much questioned, would have but little advantage and would much too closely identify one institution with the future University King's College could not under its lease from the Crown offer its premises, although it is known that its Council is most anxious to facilitate any new arrangements The only alternatives, therefore, before the University are a new and specially adapted building in a central position to be built by the Government, or its establishment at the Imperial Institute It would appear from the speech of Lord James of Hereford on accepting the chairmanship of the Imperial Institute in succession to the late Lord Herschell that the question has been practically, if not definitely, settled The Government will take over the Imperial Institute, as a preliminary step, in the name of the Crown The University will be offered the east wing of the premises as tenants under the Crown and be quite independent of the Imperial Institute financially and otherwise Considering that the present tenure of the building in Burlington-gardens is under the Crown and subject to very similar conditions there can be but little doubt as to the probable future Lord Kimberley, Sir Henry Roscoe, and Sir Joshua Fitch are negotiating and are well aware that the Crown has every control over the existing institution. By the way, those interested in the welfare of London University must not think that the labours of its reconstitution are completed with the acquisition of a new home A suitable site for central offices, good rooms for examination purposes, with proper laboratories for practical tests, especially in science, are very important, but the teaching university of London must not rest content with the provision of these facilities for education, leaving every and sundry school or college to go on the old lines depending on its own resources The medical schools are very much more interested in questions affecting their status in the University and the aid which will be afforded to them by the University than in any secondary consideration as to where the University is for official purposes to be located

HASHISH-SMOKING IN EGYPT

DR WARNOCK, who has been in charge of Egypt's solitary lunatic asylum for some years, regards the smoking of hashish as one of the most fertile causes of insanity in the country In 1898 upwards of a third of his male patients were victims of the hashish habit, but apparently the same individuals were admitted more than once Hashish is not produced anywhere in the Nile valley, the entire amount consumed finding its way into Egypt from Greece Nominally the substance has long been contraband, but Lord Cromer says that prior to 1893 no very strenuous attempts were made to put the existing laws into force The use of hashish either by smoking or in the form of a sweetmeat must be widespread among the Egyptians for last year no less than 12,000 kilogrammes of it were seized by the preventive services and presumably only a fraction of the total supply was captured At 80 grammes per head, which amount is said to "meet the requirements of a confirmed smoker for a week," the above quantity would suffice for nearly 3000 habitual consumers during a twelvemonth The coastguard agents are now very alert but they are comparatively few in number and to supervise effectively the frontier, which consists largely of sandy desert, is very difficult The extreme portability of hashish renders it an easy article to smuggle and the greatest ingenuity is exhibited in concealing it Amongst other unlikely hiding places the narcotic extract has been discovered in the hollow frames of iron bedsteads, inside specially prepared grindstones, and even in holes bored longitudinally through innocent-looking cask staves In the Piræus hashish costs about 2s 6d per pound, but owing to the "expenses of possible bribes and transport" the Egyptian retailers have to pay at least three times that sum Last year Lord Cromer was of opinion that the best way of dealing with the hashish question was to admit the substance as a taxable commodity, but he is now in favour of partial prevention. In spite of the recent extensive seizures he does not believe that total exclusion will ever be practicable "It is more than doubtful," he says, "whether the use of the drug can ever be entirely suppressed by preventive measures The efforts of the coastguard to check the introduction and of the police to detect the presence of hashish in the interior may keep the price of the drug at a comparatively high figure and thus increase the difficulties of its acquisition by the population More than this is scarcely to be expected." In this connexion it may perhaps be permissible to indicate a possible danger Experience shows that in all communities there are people incurably addicted to narcotism in one form or another who will go to any lengths to procure the means of ministering to their appetite Were hashish to be totally suppressed in Egypt the *hashash*, or habitual consumer, would inevitably seek far and near for a substitute, in alcohol perhaps or in some other narcotic of a still more deleterious character Of two evils the less should be chosen, but then the difficulty often is to determine which that is The abuse of hashish undoubtedly does cause insanity, although apparently the proportion of consumers whose mental equilibrium becomes disturbed is not a very large one In 1898 the number of hashish patients at Abbasiyeh, where the whole of the pronounced lunatics in Egypt are interned, was only 133, or about 0 01 per 1000 of the total population It would be well for England if the proportion of dipsomaniacs under restraint were no greater In England the ratio of insane to population is 3 3 per 1000, but in Egypt it is only about 0 05 per 1000 Since hashish cannot be suppressed perhaps the wisest course would be to impose a heavy tax upon it while at the same time insisting on the maintenance of a fixed standard of purity Badly prepared bhang or hashish is far more injurious than the properly elaborated extract, just as inferior whisky is more injurious than is a carefully matured spirit

THE BACILLUS OF INFLUENZA.

IN leading articles on Jan 14th and March 18th we referred to the clinical value of the bacillus of influenza. The diagnostic worth has not yet been fully investigated and, like the bacteriological corroboration of the diagnosis of diphtheria, is still doubted by some practitioners In several instances the bacillus of diphtheria and the bacillus of influenza have been found at the same time in the throats of patients, and according to the report of the Department of Health of Chicago it would seem that a bacteriological diagnosis in influenza is of special advantage in detecting this disease when complicating other diseases. The bacilli had been found present not only in cases of diphtheria but also in cases of scarlet fever, measles, and pneumonia In all these conditions it was noticed that there were clinical manifestations which were difficult to interpret until the microscopic examination was made These "mixed infections" require further elucidation Referring once more to the above-mentioned reports we find the following "In the diagnosis of suspected diphtheria some interesting observations were made relative to obscure clinical symptoms of influenza In cases which appeared at the onset to be diphtheria the presence of the Canon Pfeiffer bacillus was demonstrated and the subsequent course of the disease confirmed the microscopic diagnosis of

influenza" The report further states that in many of these cases the throat symptoms were so marked—redness and swelling of the tonsils and a well-developed membrane—that a diagnosis of diphtheria would undoubtedly have been made, yet influenza bacilli were often found in these cases in almost pure culture Cases with little throat disturbance but with rise of temperature and general depression were, on the other hand, found to be mild cases of diphtheria, although the clinical symptoms pointed strongly to influenza. It has been occasionally observed that when influenza was present in a household the eyes of some members of the family became acutely inflamed, accompanied by severe pain, swelling, and redness of the conjunctiva, with a profuse discharge of pus. Cultures were made from the discharges and the influenza organism was found to be present in large numbers Since the publication of these reports we are informed that the Canon Pfeiffer bacillus has been identified in the bronchial mucus of a number of patients presenting the characteristic symptoms of mumps, especially as to glandular swelling, pain and stiffness of the sterno-cleido-mastoid muscle, and rise of temperature These symptoms have, however, not usually lasted more than three or four days the swelling and soreness then subsiding and the temperature becoming normal Coincidentally with this subsidence of the parotitic symptoms there has in some cases occurred a sharp intestinal disturbance with, in two instances, peritonitis and dysentery The variety of conditions with which the Canon Pfeiffer bacillus is found to be associated opens a large field for bacteriological investigation.

THE JUBILEE OF MR LANGHAM, THE CITY CORONER

WE venture to anticipate the jubilee of Mr Samuel F Langham in the work of the coronership which will be attained on June 6th. It was on that day of 1849 that he was appointed Deputy Coroner for Westminster He resigned this duty when he was appointed Coroner for the City of London. He also acts as Coroner for Southwark and in the Duchy of Lancaster district, which comprises the parish of Clapham The special correspondent of the *Daily Chronicle* has had an interview with Mr Langham who is now 76 years of age. Not infrequently has he attended as many as 14 inquests in one day This is a prodigious and not very pleasant work but the coroner is bright and cheerful still A man must indeed have a happy temperament who can be cheerful after 50 years of such work. Two very striking facts come out in the short account of the interview which should be studied in connexion with each other The coroner's court is a gruesome school for the study of life and of the estimate which men put upon life. The special correspondent was evidently anxious to get the coroner's opinion as to the effect of the social and political changes of the last half century the greatest of which, perhaps is the tendency of the State to assume more and more responsibility for the individual Mr Langham was not to be drawn into a full answer to that big question, but he made one thing clear to the correspondent—in his opinion "people are growing more careless of their lives They are getting reckless like the Parisians and do not hesitate about throwing themselves away" He went on to attribute this to the greater pressure and competition of life Perhaps it is partly so but it is worth while considering whether we are not somewhat impaired in *morale* if not in physique by so much State care. William Cobbett—whose son was an early friend of Mr Langham—who was so fond of the French motto "Vivre de peu," would have said so He thought that the happiness of men consisted in acquiring not wealth but knowledge and a certain strong independence of spirit which needs little upon which to live and be happy Be this as it may we should take note of the coroner's opinion and cultivate less dependence on the State. There is far less excuse for such dependence than there was in the early days, and life, with all its competition, is infinitely richer and more varied and labour is better rewarded. But the business on which we set out was to congratulate the City Coroner on his jubilee and in heartily so doing we may add that Mr Langham was well acquainted with his brother coroner, the Founder of the THE LANCET, and is probably the only coroner now living who knew him personally

A NEW CLASSIFICATION OF MENTAL DISEASES

A SOUND and comprehensive classification of diseases is of the highest importance and in no department of medicine is this perhaps more needed than in the domain of mental diseases In the last 20 years various schemes of classification have been propounded, among the more noteworthy being those of Magnan (France), Krafft Ebing (Austria), Morselli (Italy), and the scheme of mental diseases adopted in the "Nomenclature of Diseases" of the Royal College of Physicians of London under Dr Hack Tuke and Dr Savage. In the *Journal of Mental Science* (April, 1899) Dr Lloyd Andriezen, at the close of a lengthy contribution on the "Bases and Possibilities of a Scientific Psychology and Classification in Mental Disease," propounds a classification of the insanities which is stated to be "based upon fundamental facts of evolution, upon deep seated affinities in connexion with pathological findings, and upon facts of both etiological and clinical import" This classification is said to be "a natural one and at the same time practically useful," and it is as follows. There are five main groups of insanity and the words used to designate them explain themselves, viz —

1 *Aphrenia*—Arrests of cerebral (psychical) development, with absence or deficiency of evolution of personality (*a*) Idiots of vegetative grade, helpless, wet and dirty, not educable (*b*) Idiots of medium and higher grade (many microcephalic, cretinoid epileptic partially paralytic, or simple genetic idiots), slightly improvable and educable.

2. *Oligophrenia*—Enfeeblements of cerebral (psychical) development, with a parallel enfeeblement in the evolution of personality (*a*) Imbeciles of low grade not educable. (*b*) Imbeciles of medium grade, partially educable and improvable. (*c*) Imbeciles of higher grade, partially educable and improvable, often with anti social instincts (*d*) Feeble-minded children, partially educable and improvable, often with anti social instincts

3 *Paraphrenia*—Anomalies and perversions of cerebral (psychical) development, with corresponding irregularities and perversions in the evolution of personality (*a*) *Paraphrenia mitis* Disharmonies of psychical development with an unbalanced disposition of the ego, the so-called borderland cases between sanity and insanity—e g eccentrics, cranks, mattoids, some types of revolutionists, mystics, &c (*b*) *Paraphrenia gravis* Grave anomalies and perversions of mind and personality This includes eight groups—viz: (1) with mental obsessions and irresistible impulses (e g, agoraphobia, folie du doute, dipsomania, kleptomania, &c.), (2) with delusions of rudimentary type (e g, psychopaths of the litigious, erotic and jealous, mystico-religious and other types), (3) with predominant perversion of moral and sexual nature (e g moral insanity, uranism, masochism, saidism &c), (4) with predominant criminal instincts (e g, congenital criminals of the active and of the neurasthenic types) (5) with hallucinations and systematized delusions and transformation of personality (e g, various types of "paranoia"), (6) with cyclic or periodic attacks (e g, circular insanity and folie à double forme), (7) associated with and modified by grave neuroses (e g, epileptic, hysteric choreic, hypochondriacal and neurasthenic types), and (8) associated with the evolution of puberty and adolescence (e.g hebephrenia)

4 *Phrenopathia*—Morbid conditions or derangements occurring in brains of nearly full development and of apparent previous health, with corresponding morbid alteration of the personality This includes eight types—viz:

(1) vesanic type (e g , melancholia, mania, stupor, acute mental confusion, and asthenic confusion), (2) toxic type (e g , alcoholic delirium tremens, mania à potu, chronic alcoholic insanity, lead encephalopathy, morphinism, cocainism, ergotism, and pellagra), (3) febrile micro-parasitic type (e g , some puerperal insanities, delirium acutum, and the grave delirium of influenza, scarlet fever, acute cerebral meningitis, tuberculous meningitis, &c), (4) diathetic group (e g , myxœdematous, goitrous, acromegalic and possibly diabetic insanity, post syphilitic pseudo paresis, &c), (5) chronic meningo encephalitis of progressive type (e g , general paralysis of the insane), (6) involutional type (e g , climacteric insanity and the chronic cerebral atrophy and senile insanity of middle and old age), (7) traumatic type (e g , the "cérébraux" of Lasegue), and (8) neoplastic and thrombotic type (e g , of cerebral softenings, gliomata and other neoplasms, &c)

5 *Lipophrenia* —Terminal conditions of mental dissolution secondary to previous insanities These comprise many and varied types and groups with different antecedents but with one terminus and goal to which they all tend

The basis of the above classification is the principle that abnormalities (morbid changes and alterations) may and do occur "at all stages in the evolution of the brain and of its function, from the fœtal (vegetative, somnolescent) to the sexually mature (adolescent) stage," with corresponding variations in the evolution of personality, of bodily conformation and appearance, and of conduct and capacity for intellectual, social, and ethical life Thus studied it is found that the insanities fall into five groups which assume a serial and tree like arrangement At the lower end of the series, where hereditary fœtal and intrinsic vice of organisation preponderates, we find Groups (1) and (2)—viz , the profound arrests (*aphrenia*, idiocy) and enfeeblements (*oligophrenia*, imbecility) of cerebro psychical development At the other end of the scale are grouped the morbid conditions which affect brains of nearly full cerebro-psychical development and of apparent previous health These comprise the various types and classes of the *phrenopathies*, Group (4) Between these extremes comes a "degenerative" group with anomalies of evolution in the sense alluded to and classified under *paraphrenia*—i e , Group (3) Fifth and last comes the group which includes the wrecks and remnants of previous mental disease, "chronic derelicts after storms, deprived of their mental equipments and reduced to low grades and levels of mental life—a highly motley, artificial, and lumber room group really—the chronic dements" These constitute the terminal Group (5) which for uniformity of nomenclature is termed *lipophrenia* It will be seen from the details given above that while some of the groups are sharply marked out others constitute grades and types having close affinities with allied groups and that some types must of necessity overlap or blend with others, as indeed is found in practice to be the case, and, finally, it must be borne in mind that occasionally mixed types may occur—i e , in which two or more mental morbid conditions may co-exist as combined morbid conditions exist in other parts or organs of the body

THE DANGERS OF CHEMICAL TRADES

THE locked up energy in certain chemicals must always be a possible source of danger to the workers concerned in their elaboration The disaster at St Helens, Lancashire, on May 12th was essentially one arising from chemical manufacture, though the cause of the frightful explosion which occurred and by which several persons met a ghastly death is not easy to account for All that can be said is that the explosion had its origin in the tank where chlorate of potash was being crystallised on a large scale The tank was observed to be on fire which rapidly extended to the storehouse Chlorate of potash is, of course, not *per se* combustible, but it is a powerful aid to combustion under some circumstances by reason of the readiness with which it parts with its oxygen Alone, the greatest possible mass of chlorate of potash would be quite harmless What, then, was the combustible matter in the chlorate crystallising house which subsequently led to a disastrous explosion? If by any chance sulphuric acid had reached the shed the highly explosive compound chlorine peroxide would have been evolved, but there is no evidence on this point. The force of the explosion liberated some quarter of a million cubic feet of coal gas in the neighbouring gasholders which caught fire and burnt with considerable energy At the same time tanks containing vitriol were destroyed and tons of this corrosive fluid streamed down the streets to the sewers. It is difficult, therefore, to calculate the extent of the mischief Doubtless some light will be thrown on the disaster at the inquest which was adjourned on May 15th until May 30th.

COINCIDENCES IN HOSPITAL PRACTICE.

IN THE LANCET of May 13th we published an article by Dr F J Smith, Mr C Mansell Moullin, and Dr Arthur Keith, on two very rare forms of hernia which came under observation at the London Hospital within six weeks of each other This week in our "Mirror of Hospital Practice" our readers will find an account by Mr Frederic Eve and Mr J McCarthy, with pathological notes by Mr H. L. Barnard, of two cases of filariasis which were admitted consecutively into the same bed in the same hospital (the London Hospital), and all medical men connected with hospitals know the strange frequency with which these coincidences occur, and probably every member of the staff of any large hospital will be able to recall similar occurrences both in the wards and in the out-patient rooms—two cases of actinomycosis admitted within a day of each other, two cases of plastic bronchitis coming to the out-patient room within the same week, &c In short, the doctrines of chance seem to be regularly defied in hospital practice

PLUMBISM MISTAKEN FOR APPENDICITIS AND OTHER ABDOMINAL CONDITIONS

IN the *Journal of the American Medical Association* of April 15th Dr J P Lord has published the following case He was asked by the physician in attendance to see a case of appendicitis which had been admitted to hospital The patient was a corpulent man, aged 28 years, with a fat, prominent abdomen He was somnolent and delirious There were constant vomiting, pain and tenderness chiefly somewhat internal to McBurney's point, board like rigidity of the whole abdomen, and general tympanites except over an area of the size of the palm just internal to the normal position of the appendix, where there was an indistinct doughy mass, dull on percussion The patient had been constipated for five days and was in a serious condition and getting weaker A previous attack had occurred Laparotomy was therefore immediately performed by the McBurney incision. A long appendix free from adhesions was removed. It was healthy, though it was thickened, and contained two small fæcal concretions The cæcum and presenting part of the ileum were distended and congested. Exploration revealed a mass of ileum and jejunum contracted to the diameter of the little finger The cæcum was punctured by a trocar to allow gas to escape and a solution of Rochelle salts was injected. The patient began to improve after the bowels acted some hours later Dr Lord remarked that the only similar case which he had seen was in a man in whom plumbism was discovered after operation He then was told that the patient whose case has been described had been a plumber A well marked blue line was found on the gums The man had not worked at his trade for four years but he was a barman and the beer which he drew and also drank

passed through about 10 feet of leaden pipe In the other case referred to by Dr Lord, the diagnosis was obscure. The patient insisted that the contents of his bowels were arrested at the painful point—the splenic flexure of the colon—and demanded operation All that was found was a constriction of the colon for about ten inches at the splenic flexure, the gut being reduced to the size of a finger Plumbism was only discovered afterwards Literature for the most part is mute on this intestinal condition. But Dr Oliver states in Allbutt's "System of Medicine" that in animals he has found the small intestine irregularly contracted, at places so extreme was the spasm that the intestine felt like a piece of cord its calibre being obliterated In the *Journal of the American Medical Association* of Jan 4th and 11th 1896, Dr T B Murphy also has described a case in which obstructive symptoms occurred in a subject of plumbism. The abdomen became greatly distended and cathartics and injections failed to relieve the constipation. The medical attendant believed that the condition differed materially from previous attacks of lead colic which the patient had had An enlarged coil of intestine could be seen leading up to the right hypochondrial region Laparotomy was performed. The enlarged coil was found to terminate in a contracted portion which resembled a solid cord three-eighths of an inch in diameter At first it was believed to be an organic stricture. But after about 10 minutes' exposure to the air the spasm subsided and the intestine dilated Recovery ensued.

THE NATIONAL ANTI-VIVISECTION SOCIETY

THE annual public meeting of the National Anti vivisection Society held at St James's Hall is described as having been an enormous gathering and the speeches reported as having been delivered appear to have been worthy of the occasion Without criticising them at length we note with interest the way in which each of the principal speakers approached the question from his personal or professional point of view and we venture to express a doubt whether in each case he would secure the undivided support of those addicted to the same pursuits or members of the same profession For example, the Duke of Portland, with whose views of the national value of sport to England and Englishmen we agree, found himself led on to say, if he is correctly reported [1] that "the object of the sportsman was to kill his quarry outright with as little pain as possible.' The most enthusiastic sportsman would hardly contend that to run a fox into the next county (and perhaps have to leave it at large to die from exhaustion) is to kill it with as little pain as possible Again, Lord Coleridge, Q C, naturally used legal phrases and talked of "a very careful investigation of the facts" after which "he entirely disbelieved the statement that vivisection led to discoveries which tended to alleviate human suffering" [2] We confess that we should like to hear his lordship cross-examined by one of his learned friends in order to ascertain the precise evidence upon which he relied in his investigation and the precise quality of the judicial spirit in which he approached it. Canon Wilberforce in his turn, "stood on the side of St. Paul and believed that the lives of animals were bound to our own by a mysterious solidarity which we were at present unable to realise that in the great eternal world we (i.e. men and animals) should sink or swim together He would rather enter into a Nirvana with some dogs he had known than he would go into a narrow salvation with some so-called religionists" We can only leave Canon Wilberforce to theologians for criticism and comprehension Mr Stephen Coleridge at least adhered to the one rational standpoint open to him in declaring his view that to lengthen human life, if so doing implied the infliction of pain on animals, was unjustifiable and morally wrong This is an opinion which everyone is entitled to hold if he or she will consistently act upon it in sickness as well as in health

[1] Morning Post, May 10th, 1899. [2] Ibid.

THE FAMINE IN EAST AFRICA

MISS CONSTANCE IRWIN last week sent to the *Times* extracts from a letter written by Miss Dunford of the University Mission to Central Africa giving a terrible account of the suffering of the people from plague and famine in the neighbourhood of Magila, Bonde, East Africa. The Foreign Office is making inquiries into the case and it is to be hoped that it will send some relief. Any who are disposed to help should send contributions to the secretary, Universities Mission to Central Africa, 9, Dartmouth street, Westminster, S W

A NEW PETROLEUM BILL.

IT is stated that the Government's proposals in regard to amended legislation on the storage and sale of petroleum have at length been drafted in a Bill. It would appear that the regulations as to sale and storage which now apply to petroleum with a flash point under 73° F are to be maintained, but less stringent regulations of a similar character will in all probability be applied to petroleum having a flash point of between 73° and 85° The new measure would seem, therefore, to provide less stringent regulations for the storage of the oil but would place more control over the sale and use of oil of a definite flash point.

THE PHYSIOLOGICAL ACTION OF CHOLINE AND NEURINE

IN a paper recently (April 20th) read before the Royal Society Dr F W Mott and Dr W D Halliburton, the writers, gave the results of experiments made on anæsthetised animals which showed that the cerebro-spinal fluid removed sometimes after death and sometimes by lumbar puncture during life from cases of brain atrophy, and especially from patients suffering from general paralysis of the insane, caused when injected into the vessels a fall of arterial pressure with but a trifling effect on the respiration Chemical examination of the fluid proved that it contained nucleo-proteid and choline and further experiments demonstrated that the effect on the circulation was due to the choline The composition of choline given by Waller is $C_5H_{15}NO_2$. It is closely related to, but is not identical with neurine The crystals of the platinum double salt when crystallised from 15 per cent. alcohol are characteristic octahedra There is every reason to believe that choline proceeds, like the nucleo-proteid, from the acute disintegration of brain tissue The writers of the paper think that some, but not all, of the symptoms of general paralysis are due to auto-intoxication, nucleo-proteid and choline contained in the cerebro-spinal fluid being absorbed into the blood. In accordance with this they have found choline in the blood of general paralytic patients drawn by venesection. When from one to 10 cubic centimetres of solutions of choline containing two parts in 1000 were injected into the vessels a temporary fall of blood pressure occurred, due in part to its action on the heart but chiefly to dilatation of the peripheral vessels of the intestinal area. This effect is attributable to the direct action of the base on the neuro-muscular mechanism of the blood vessels themselves for the reduction of pressure still continued to occur after removal of the central nervous influence by section of the spinal cord Choline has little or no action on the nerve trunks as tested by their electrical response to stimulation. In

regard to neurine, which has the formula $C_5H_{13}NO_2$ it was found that intravenous injection of from one to five cubic centimetres of a solution containing one part to 1000 caused a fall of arterial pressure followed by a marked rise and a subsequent fall to the normal level The fall in the first instance is due to slowing and weakening of the heart's action with possibly a dilating influence on the peripheral vessels The secondary rise in the blood pressure is due to the constriction of the peripheral vessels, as shown by oncometers applied to the intestine, spleen, and kidney The typical effects of neurine are still obvious after removal of the influence of the central nervous system by section of the spinal cord or of the splanchnics After, however, the action of the peripheral ganglia has been cut off by the use of nicotine neurine produces only a fall of blood pressure It hence appears that the constriction of the vessels is due to the action of the drug on the ganglia Section of the vagi had no influence on the results of injecting either choline or neurine and there was no evidence that either base acted directly on the cerebral vessels Unlike choline, neurine is intensely toxic to nerve trunks The writers confirm the statement of Cervello that neurine acts like curare on the nerve endings of voluntary muscle and that the cessation of respiration is due to this action

A FRENCH VIEW OF FRENCH ALCOHOLISM

NOT the least of the many evils affecting France is her consumption of alcohol It is known that the honest glass of light wine which used to meet the wants of the ordinary Frenchman is now supplemented with spirit in all forms and that France is first of all countries in the amount of alcohol which is consumed The only hopeful thing about the fact is that Frenchmen are beginning to perceive it and its grave significance The *Figaro* is devoting a series of papers to the discussion of the question and to a statement of the disastrous effects which are already apparent in the French population The second of these papers is before us and no teetotal newspaper in England could give more convincing figures or testify more faithfully to the degradation, physical and moral, which overtakes the communities which are distinguished by their excess The one set-off in theory is that the substitution of stronger drinks for lighter ones produces temporary satisfaction—a merry life if a short one Instead of this a general depression, a melancholic tendency, is the effect, and life is "short and horrible" The drinkers are morose and suicidal in the direct ratio of the alcohol taken In the years from 1861 to 1865 there entered the asylums of France 14,983 insane persons, in the same space of time twenty years after there entered more than 57,000 Dr Serieux has made researches on this point as to the rôle of alcohol and he has found that of the relapsed cases (*récidivistes*) 78 per cent were drinkers, while of violent lunatics 88 per cent were drinkers Short of insanity the *moralé* of the French workman is rapidly deteriorating under the influence of alcohol He loses his ambition and goes down from a master worker to a labourer The degeneration affects whole families, especially in Normandy An instance is given of a family which had occupied a mill for two generations At first they were giants (*colosses*), now the grandchildren are dwarfs and stunted They are without any desire to be raised again and prefer to be servants In some parts the drinking is incredible, thus the peasants in the neighbourhood of Flers and Falaise "have the glory of having arrived at the consumption of *un litre d eau de vie de cidre par jour*," or 365 litres per year In Normandy the women are as bad as the men and the infants are getting *eau de vie* in all their food What strikes the writer in the *Figaro* is that while other nations are alarmed and are making efforts to overcome this terrible agent France is drinking more and more He quotes encouraging facts as to the success of such efforts In Sweden, e g, the race threatened to be extinguished by a consumption in 1829 of 23 litres per head per annum, they set themselves strenuously to resist and have brought the consumption down to 3 2 litres. So in other countries. The patriotic writer says "Shall we leave France to her fate without an attempt to save her?" and answers with a thousand Noes We have too big a beam in our own eye to moralise on the state of France, but we rejoice that this gigantic evil is being recognised by Frenchmen and we heartily hope for the victory of France over one of her greatest enemies

ANNUAL ORATION AND CONVERSAZIONE AT THE MEDICAL SOCIETY OF LONDON

THE annual oration of the Medical Society of London was delivered at the society's home in Chandos-street on May 15th and was listened to by a very large number of members and guests who were received by the President, Mr Edmund Owen The oration was delivered by Mr Alban Doran on Shakespeare and the Medical Society and was a very brilliant performance. A vote of thanks was proposed by Dr Thorowgood, seconded by Sir William Dalby, and carried by acclamation Subsequently a conversazione was held in the rooms which were crowded till a late hour Excellent music was provided by the Bijou Orchestra and a most enjoyable evening was spent, thanks to the careful arrangements made by the honorary secretaries, Dr Calvert and Mr Battle, and the registrar, Mr W R Hall

PHLEGMASIA DOLENS IN TYPHOID FEVER

PHLEGMASIA dolens is rare in typhoid fever, Murchison estimated its incidence as 1 per cent In an interesting lecture published in the *Boston Medical and Surgical Journal* of March 23rd Dr Da Costa states that among 215 cases of typhoid fever in soldiers admitted into the Pennsylvania Hospital phlegmasia dolens occurred in no less than 30, or 14 per cent The general proportion of cases with this complication in the hospital is not more than 1 or 2 per cent. In 18 cases under the care of Dr Da Costa the left leg was affected in three, the right in two, and both legs in 13 He explains the frequency of the complication in soldiers by predisposition from distension of the veins of the legs in marching But excepting some from Porto Rico most of the soldiers came from training camps where marching was not excessive though more than men just come from civil life were accustomed to The gravity of the infection also was important, for nearly all the cases occurred in those in whom the fever had been severe This complication occurred mostly at the end of the fever or during convalescence The earliest symptoms are increased temperature and pain in the limb Chills sometimes precede it. The pain is usually associated with tenderness which first shows itself in the calf Swelling is generally obvious, especially below the knee The limb is tense and hard though there may be some pitting around the ankles and calf The skin is pale or white, but here and there an erythematous blush or even a small ulcer is seen The veins may be prominent or not, tender or not Those most usually affected are the internal saphenous and femoral, especially at their junction, sometimes the affection extends to the iliac veins and even to the vena cava As to the pathology Dr Da Costa regards the complication as primarily thrombosis which afterwards may or may not be complicated by phlebitis or periphlebitis. As a rule the thrombus gradually disappears without serious symptoms and the phlebitis if present slowly yields, or an adhesive inflammation results and a collateral venous circulation is established But cases have been recorded

n which pyæmia or fatal embolism occurred. In a case bserved by Dr Da Costa death resulted from embolic neumonia. Gangrene is an occasional result. Recovery s slow and the leg may remain swollen for months r readily become so after exercise The dilated superficial eins may show how much the circulation has been interered with, and adhesive inflammation may leave the aphenous or femoral vein hard and cord like The treatnent consists in elevating the leg to assist the circulaion and in applying heat and bandaging to relieve the pain A fomentation of equal parts of hot lead lotion and laudanum ives the most relief Constipation, if present, must be reated. If the pain is persistent belladonna plaster in trips or belladonna ointment applied along the vein is often seful When the patient leaves his bed the limb should be well bandaged which must be continued, or an elastic stocking must be used, for a long time until the veins recover their tone and until symptoms of obstruction have disappeared.

LIFE TABLES

AT a meeting of the Royal Statistical Society held on May 16th in the Lecture Theatre of the Royal United Service Institution, a paper was read by Mr T E Hayward, medical officer of health of Haydock, Lancashire, "On Life Tables their Construction and Practical Uses' Allusion was first made by Mr Hayward to the relative importance of vital statistics as compared with other subjects from time to time brought before the society and the special value of life tables was emphasised A life table was then defined as a scientific instrument designed for exactly measuring the forces of life and death prevailing, whether among a whole nation or in the separate communities which constitute the nation, and it was pointed out that only by the use of life tables was it possible for exact comparisons to be made in these respects Mr Hayward had as his primary object in preparing the paper the desire to aid his brother medical officers of health in comprehending what had been regarded as a very abstruse and difficult matter and thus to promote the more general working out of local life tables for the various sanitary districts into which the country is divided. Special emphasis was laid upon the fact that no very profound mathematical knowledge is required for this work, the only equipment needed being a working knowledge of the use of seven figure logarithms and some patience in applying the ordinary rules of arithmetic and the endeavour would be made so fully to explain the subject that the plain man need not err therein

INTERNATIONAL EPIDEMIOLOGY

THE geographical distribution of disease is a subject concerning which we know considerably more than of the laws which govern such distribution, and, unfortunately for the study of these laws, diseases, whether endemic or epidemic, are no respecters of international boundaries or scientific frontiers, unless, indeed, such frontiers happen in any case to be conterminous with the natural limitations of any given disease While therefore this condition of affairs obtains we must be content to study the behaviour of the disease by making use of the facilities which national statistics and administrations afford, and by the comparison of the results and impressions obtained in one nation with those obtained in others Doubtless had there been a universal language far greater progress would have been made in this direction than has been the case up to the present, and it is to be feared that until the English develop greater linguistic tendencies some of the good work done by workers in European countries other than France and Germany must remain but imperfectly appreciated We are glad, however, to see that the Epidemiological Society of London are developing the international aspect of their society and that Dr Saltet, the Professor of Hygiene in the University of Amsterdam and Foreign Secretary of the Epidemiological Society of London for Holland and Belgium, is to deliver an address at the rooms of the Medical Society, 11, Chandos street, Cavendish square, W, at 8 30 P M on Friday, May 19th Professor Saltet has selected for the title of his paper "A Study of Enteric Fever in the Netherlands," and as the address is, we hear, to be delivered in English, a language which Professor Saltet speaks quite fluently, an interesting discussion may be looked forward to It is probable that but few of the members of the society are so familiar with Dutch as to be able to debate in it

ELEMENTARY CHEMISTRY

IT is remarkable, when elementary chemistry is reinvestigated under the conditions afforded by the increased facilities of modern times, what interesting results are obtained. Chemists would seem to have been spellbound by the interesting possibilities opened up by the pursuit of the organic section of the science, taking the rudiments as granted and established long ago But if these investigators could be induced to leave the alluring and fascinating field of organic research in favour of elementary inorganic work the results would be equally interesting and probably equally, if not more, important in strengthening the substructure of the science At the last meeting of the Chemical Society Professor Harold B Dixon detailed the results of some simple experiments and they proved interesting Thus, in dealing with the combustion of carbon disulphide he found that the vapour undergoes a phosphorescent combustion in air similar to that of phosphorus and sulphur In the combustion of carbon disulphide, in spite of the presence of an excess of oxygen, small quantities of unaltered carbon disulphide as well as oxysulphide and monoxide of carbon remain In another paper Professor Dixon showed that in the combustion of carbon it is not strictly true that the formation of carbon dioxide is due to a single and direct action between carbon and oxygen It has been accepted that carbon monoxide is only formed by a secondary action between carbon dioxide and carbon On the other hand, experiments would seem to make it very probable that in the combustion of carbon the incomplete product carbon monoxide is first formed. This should throw some light on the conditions ensuring the perfect combustion of coal and coal gas and thus directly affect the question of smoke abatement. It is now well known, further, that in the products of the spontaneous oxidation of coal at ordinary temperatures deadly carbon monoxide occurs which would injuriously affect the health of miners

TUBERCLE OF THE TESTICLE IN CHILDHOOD.

THE *Journal de Clinique et de Thérapeutique Infantiles* of May 4th contains a report of M Feliziet's observations on 58 cases of tubercle of the testicle in childhood From these it appears that the disease almost invariably attacks this organ in children under seven years of age As in adults, the epididymis is by far its most usual place of origin the cord is less often invaded, the prostate the vesiculæ seminales, and the bladder still less frequently Hydrocele is rarely present and the course of the disease, as might be expected in tissues which are virtually embryonic is often rapid, infection proceeding not only by the spermatic blood-vessels but by the inguino-iliac lymphatics also M Feliziet is not an uncompromising advocate for castration as a remedy but is disposed up to a certain point to rely on hygienic and medicinal measures Even when there is adhesion of the testicle to the scrotum and subsequent abscess formation

he is content to employ local conservative methods When, however, in addition to suppuration there are present the signs of general impairment of health he advocates immediate removal of the gland as the only means of preventing a very rapidly fatal form of general tuberculosis Unfortunately, we are not informed of the results obtained by treatment in these 58 cases If they should hereafter be forthcoming they ought materially to aid a decision as to the true indications for castration in the infantile variety of this disease M Felizet contends that the condition of rapid tissue development is not favourable to the resistance of an infective process and in that case the stage of hygienic treatment and local conservative surgery must be a period of watchful care and not be too prolonged Many authorities consider that in the adult excision of the testicle offers the best hope of cure and we are still in want of proof to show that the case of children is materially different

TUNG WAH HOSPITAL, HONG-KONG

IN the report of the Hong Kong Medical Department for 1897 several pages are devoted to the Tung Wah Hospital Dr J M Atkinson, the principal civilian medical officer of the colony, considers that the existence of this institution in which more than four fifths of the inmates are treated by so-called Chinese methods is somewhat anomalous in a British colony Without discussing the expediency of humouring the prejudices of the Chinese population, who out-number the Europeans by 20 to one, he is of opinion that from a medical point of view the hospital ought to be abolished, although he admits that it serves a useful purpose as an asylum for destitutes and a resting place for the dying The medical staff have no knowledge of surgical treatment and no instruments, pitch plaster is their panacea for all surgical injuries and diseases, and they never admmister chloroform Once in 1895 when Dr Atkinson showed them the relief which a catheter gave to a patient suffering agonies from distension of the bladder they smiled and seemed highly amused, but it did not occur to them that such knowledge would be useful The patients are mostly poor people of the artisan class, coolies, &c , all of whom have a dread of the foreigner and his methods Treatment on European principles carried out by a Chinaman, Dr Chung, may be had by those who desire it, and it is the practice for the head coolie to ask the patients at the time of admission which system they prefer Dr Atkinson considers that the indigent Chinese should be treated according to European methods in a hospital under the direct supervision of the Colonial surgeon in charge, the Asiatic medical staff being employed only as dressers, a course for which there is a precedent in the Taa Tock Seng Hospital at Singapore, where the great majority of the patients are Chinese An appendix to Dr Atkinson's report contains a statement of the work done by Mr Frank Browne, F C S , in the Government laboratory There were five cases of datura poisoning investigated during 1897, all of them being with criminal intent All the patients recovered The mydriatic principle of datura was isolated from their urine without difficulty

SANITATION IN EDINBURGH

WE have received a copy of the annual report of the chief sanitary and market inspector of the city of Edinburgh (Dr A M Williamson) for the year 1898 from which it would appear that distinct sanitary progress is being made The sanitary supervision of the city is being extended, and to carry this out more satisfactorily the city has been divided into wards, and for this purpose the services of nine inspectors have been retained to make a door to-door inspection 'in quest of conditions of an insanitary nature' Four other inspectors devote their time to dairy, bakehouse, and lodging house inspection and the carrying out of the provisions of the Factory and Workshops Act, the Shop Hours Act, and the Food and Drugs Acts The report is illustrated with some excellent and instructive diagrams on the relation of overcrowding, &c , to the public health. Under the Food and Drugs Acts 50 per cent. of the articles secured were of doubtful quality, milk and butter being the subjects most liable to adulteration Under the Margarine Act seven prosecutions were instituted and a conviction followed in each case Dr Williamson points out that a great laxity exists in carrying out the provisions of this Act. An excellent look out is kept in the city to exclude as far as possible the sale of tainted meat. Under the heading of tuberculosis Dr Williamson makes one important remark which applies, we feel sure, to other cities in the kingdom. "Every byre in the city," he says, "is regularly inspected once a fortnight, and in this manner the slightest indication of a commencing disease of this dangerous nature is at once detected" "The importance of extending the system of inspection," he adds, "to those country byres which contribute supplies of milk to the city is accentuated by an inquiry which I have recently instituted as to the source of the whole of our milk supply This inquiry disclosed that while the daily consumption of sweet milk amounts to nearly 13,000 gallons, between 7000 and 8000 of these—i e , more than half—are received from districts to which our inspection does not extend" This section of the report is accompanied by an excellent plate showing the microscopical appearance of tuberculous milk

THE ROYAL BRITISH NURSES ASSOCIATION.

THE *café chantant* presided over by H R H the Princess Christian at the Hotel Cecil on May 15th was a great success Both afternoon and evening the rooms were filled with an audience which will probably mark the occasion as one of the principal events of the season. Amongst those who, in addition to the Royal President, honoured the entertainment with their presence were the Prince of Wales, Prince Christian, the Duchess of York, the Duchess of Connaught, Princess Henry of Battenberg, Princess Victoria, the Duke and Duchess of Devonshire, and the Duchess of Marlborough The practical manner in which the assembly showed appreciation of the association and its objects should do much to place it on a permanent basis The object is to further everything which appertains to nursing Unfortunately its work has been greatly retarded by internal dissensions Now, however, these have been overcome and it is to be hoped that many prominent matrons and others holding high positions in the nursing world who formerly refused to support the association will now withdraw their opposition and join its council in its efforts to sustain the honour of its members Amongst its many endeavours is one which will appeal to everyone—namely, the establishment of an endowment fund to provide for nurses who from age or physical infirmity are unable to carry on their duties The substantial sum which the *café chantant* must produce will materially benefit this special fund The programme must have satisfied the most critical Recitations, songs, and dramatic interludes followed each other in rapid and varied succession. The theatres sent a strong contingent of well known artists, such as Lady Bancroft, Mr Charles Wyndham, Mr H B Irving, Mr Louis Calvert, Miss Esmé Beringer, Miss Mabel Lewis Terry, Mr Cyril Maude, Mrs Tree, and many others no less celebrated, while the opera and concert hall were represented by Mr Joseph Hollman, Miss Marian Mackenzie, Miss Giulia Ravogli, Madame Alice Gomez, Miss Clara Butt, Vladimir de Pachmann, Johannes Wolff, and Madame Norcrosse The highest praise

due to Mr George Alexander for the manner in which he ganised the entertainment and Mr. Lionel Brough and : H. H. Vincent were indefatigable as stage managers. any other ladies and gentlemen also rendered good service.

DENATURALISATION

"DENATURALISATION" is a term which is now applied that process which renders certain substances unfit for man consumption. The process has become a necessity modern times in order to promote fairness in commercial mpetition and to cheapen certain commodities when used clusively in industrial operations. Thus a few years ago e manufacture of caffein was almost monopolised by ermany on account of the fact that tea intended for human nsumption in this country was too expensive to extract. wing, however, to the representations of English scientific anufacturers a revised regulation was framed a few years go according to which damaged tea could be admitted ity free provided that it was "denatured" and rendered holly unfit for human consumption by treatment with lime d asafœtida. Tea treated in this way is now used probably for the manufacture of caffein and England has come the chief seat of the manufacture and has thus completely turned the tables upon her competitors, for now the kaloid is exported from this country to Germany and merica. A similar example, we believe, occurs in the case f damaged or unclaimed tobacco which previously was estroyed in the "Queen's pipe" at the docks. Instead f this waste going on such tobacco is now largely used r the preparation of nicotine washes for killing vermin, &c. Without "denaturalisation" alcohol for the purposes of the rts and industries would be so expensive as to be prohibitive ecause it would be drinkable. But recourse has been ade to adding a substance to the spirit which makes it ndrinkable but which at the same time does not interfere ith its properties for certain manufacturing processes formerly wood spirit was employed, but, such is the evil ndency of human nature, the vile mixture became a cheap nd favourite tipple. Next a proportion of petroleum spirit as tried, a method obtaining at the present day, but even his has been found to be a palatable, as it certainly is an toxicating mixture by some persons. Cases are even ecorded in which some depraved wretches find paraffin il an agreeable stimulant. The problem therefore of "denaturing" alcohol cannot be regarded as satisfactorily ettled. The latest suggestion is acetone oil, of which 1 per ent. is said to be sufficient. But that nasty nauseous, nion smelling liquid, allylic alcohol, is said to give even etter results added in the proportion of one-tenth to one-half er cent. in volume. The desiderata of a "denaturaliser" for lcohol are that it should render it unfit for consumption ithout making it more inflammable while the material hould be cheap and easy to detect and its separation by ectification should be impossible for any commercial dvantage.

T.R.H. THE DUKE AND DUCHESS OF YORK will on Thursday June 22nd visit Chalfont St. Peter to open four new homes at the colony established there by the National Society for Employment of Epileptics, of which His Royal Highness is president. These homes comprise two for children, one for men, and one for cases requiring special care and treatment, and they will in the aggregate increase the existing accommodation of the colony by nearly 100 beds. The cost of building the new homes has been defrayed by special donations given respectively by Mr Passmore Edwards, Mr Frederick Greene, and Mrs Dearmer but the cost of the necessary furniture and equipment has as yet been only partially provided.

WE regret to learn that Dr W. S. Playfair sustained a somewhat severe shaking last week in an accident which occurred to the motor-car in which he was riding. The heavy car turned over and fell on his back. He was carried into the surgery of Mr W. H. Beresford of Egham Hill, whose assistant, Mr Sherwen, conveyed him to London under the influence of an anæsthetic. He sustained no serious injury beyond considerable shock and severe muscular contusions, from which he is now rapidly recovering.

UNDER the title "The Spinal Animal" Dr. Sherrington, F.R.S., who was recently awarded the Marshall Hall Prize by the Royal Medical and Chirurgical Society, will deliver an address illustrated by diagrams and lantern slides at the next meeting of that society to be held at 20, Hanover-square, W., on Tuesday, May 23rd, at 8.30 P.M. Dr. Sherrington's well-known researches on the subject which he has chosen for his address give promise that it will be of great scientific value.

THE Council of the Childhood Society announce a discussion to take place on Friday, June 2nd, at 5 P.M. in the library of the Sanitary Institute, 72, Margaret-street, W. The subject will be the Education of Children Feebly Gifted Mentally under the Care of Guardians and it will be opened by Dr G. E. Shuttleworth.

WE have received a nicely got up little pamphlet containing a translation into Italian of the report of THE LANCET Special Commission on Sicily as a Health Resort. It is issued by the Associazione pel Bene Economico at Palermo.

SIR FELIX SEMON requests us to state that an article concerning himself which appeared in a recent issue of *M.A.P.* was published without his knowledge and consent.

PROFESSOR R. C. JEBB, M.P., has consented to distribute the certificates and prizes at King's College, London, on July 12th.

THE LECTURESHIP ON TROPICAL MEDICINE AT ABERDEEN UNIVERSITY

BRIGADE-SURGEON-LIEUTENANT-COLONEL G. A. MACONACHIE, I.M.S., M.D. Aberd., M.R.C.P. Lond. late Principal of the Grant Medical College, Bombay, delivered on May 1st in Marischal College, Aberdeen, his introductory address in connexion with the recently established lectureship on tropical medicine. There was a large attendance.

Principal Sir WILLIAM GEDDES, who presided, in a few introductory remarks said that Dr Maconachie had been for 25 years professor in the Grant Medical College and that the University had made a good selection in appointing him to this important lectureship.

Dr MACONACHIE in opening his address made the remark that it had been calculated that about one-fifth of the medical profession practise at one time or another in tropical and sub-tropical countries in various capacities, such as medical officers of the navy and army including the Indian Medical Service, medical officers of railways and telegraph companies, mines, tea-gardens, shipping companies, also as medical missionaries and private practitioners, male and female. A knowledge of tropical medicine is essential for all who occupy such positions, but up to the present time no arrangements have been made for giving them the necessary information except in the case of the army and perhaps the navy. This instruction, however was very necessary in the Aberdeen Medical School, for its graduates were to be found in most parts of the world and some of them filled prominent positions such, for instance as the present Director General

he is content to employ local conservative methods When, however, in addition to suppuration there are present the signs of general impairment of health he advocates immediate removal of the gland as the only means of preventing a very rapidly fatal form of general tuberculosis Unfortunately, we are not informed of the results obtained by treatment in these 58 cases If they should hereafter be forthcoming they ought materially to aid a decision as to the true indications for castration in the infantile variety of this disease M Felizet contends that the condition of rapid tissue development is not favourable to the resistance of an infective process and in that case the stage of hygienic treatment and local conservative surgery must be a period of watchful care and not be too prolonged Many authorities consider that in the adult excision of the testicle offers the best hope of cure and we are still in want of proof to show that the case of children is materially different

TUNG WAH HOSPITAL, HONG-KONG

IN the report of the Hong Kong Medical Department for 1897 several pages are devoted to the Tung Wah Hospital Dr J M Atkinson, the principal civilian medical officer of the colony, considers that the existence of this institution in which more than four fifths of the inmates are treated by so-called Chinese methods is somewhat anomalous in a British colony Without discussing the expediency of humouring the prejudices of the Chinese population, who out-number the Europeans by 20 to one, he is of opinion that from a medical point of view the hospital ought to be abolished, although he admits that it serves a useful purpose as an asylum for destitutes and a resting place for the dying The medical staff have no knowledge of surgical treatment and no instruments, pitch plaster is their panacea for all surgical injuries and diseases, and they never admmister chloroform Once in 1895 when Dr Atkinson showed them the relief which a catheter gave to a patient suffering agonies from distension of the bladder they smiled and seemed highly amused, but it did not occur to them that such knowledge would be useful The patients are mostly poor people of the artisan class, coolies, &c , all of whom have a dread of the foreigner and his methods Treatment on European principles carried out by a Chinaman, Dr Chung, may be had by those who desire it, and it is the practice for the head coolie to ask the patients at the time of admission which system they prefer Dr Atkinson considers that the indigent Chinese should be treated according to European methods in a hospital under the direct supervision of the Colonial surgeon in charge, the Asiatic medical staff being employed only as dressers, a course for which there is a precedent in the Tan Tock Seng Hospital at Singapore, where the great majority of the patients are Chinese An appendix to Dr Atkinson's report contains a statement of the work done by Mr Frank Browne, F C S , in the Government laboratory There were five cases of datura poisoning investigated during 1897, all of them being with criminal intent All the patients recovered The mydriatic principle of datura was isolated from their urine without difficulty

SANITATION IN EDINBURGH

WE have received a copy of the annual report of the chief sanitary and market inspector of the city of Edinburgh (Dr A. M Williamson) for the year 1898, from which it would appear that distinct sanitary progress is being made The sanitary supervision of the city is being extended, and to carry this out more satisfactorily the city has been divided into wards, and for this purpose the services of nine inspectors have been retained to make a door-to-door inspection 'in quest of conditions of an insanitary nature' Four other inspectors devote their time to dairy, bakehouse, and lodging house inspection and the carrying out of the provisions of the Factory and Workshops Act, the Shop Hours Act, and the Food and Drugs Acts The report is illustrated with some excellent and instructive diagrams on the relation of overcrowding, &c , to the public health. Under the Food and Drugs Acts 50 per cent of the articles secured were of doubtful quality, milk and butter being the subjects most liable to adulteration Under the Margarine Act seven prosecutions were instituted and a conviction followed in each case Dr Williamson points out that a great laxity exists in carrying out the provisions of this Act. An excellent look out is kept in the city to exclude as far as possible the sale of tainted meat Under the heading of tuberculosis Dr Williamson makes one important remark which applies, we feel sure, to other cities in the kingdom. "Every byre in the city," he says, "is regularly inspected once a fortnight, and in this manner the slightest indication of a commencing disease of this dangerous nature is at once detected" "The importance of extending the system of inspection," he adds, "to those country byres which contribute supplies of milk to the city is accentuated by an inquiry which I have recently instituted as to the source of the whole of our milk supply This inquiry disclosed that while the daily consumption of sweet milk amounts to nearly 13,000 gallons, between 7000 and 8000 of these—i e , more than half—are received from districts to which our inspection does not extend" This section of the report is accompanied by an excellent plate showing the microscopical appearance of tuberculous milk

THE ROYAL BRITISH NURSES ASSOCIATION

THE *café chantant* presided over by H.R.H the Princess Christian at the Hotel Cecil on May 15th was a great success Both afternoon and evening the rooms were filled with an audience which will probably mark the occasion as one of the principal events of the season. Amongst those who, in addition to the Royal President, honoured the entertainment with their presence were the Prince of Wales, Prince Christian, the Duchess of York, the Duchess of Connaught, Princess Henry of Battenberg, Princess Victoria, the Duke and Duchess of Devonshire, and the Duchess of Marlborough The practical manner in which the assembly showed appreciation of the association and its objects should do much to place it on a permanent basis The object is to further everything which appertains to nursing Unfortunately its work has been greatly retarded by internal dissensions Now, however, these have been overcome and it is to be hoped that many prominent matrons and others holding high positions in the nursing world who formerly refused to support the association will now withdraw their opposition and join its council in its efforts to sustain the honour of its members Amongst its many endeavours is one which will appeal to everyone—namely, the establishment of an endowment fund to provide for nurses who from age or physical infirmity are unable to carry on their duties The substantial sum which the *café chantant* must produce will materially benefit this special fund The programme must have satisfied the most critical Recitations, songs, and dramatic interludes followed each other in rapid and varied succession. The theatres sent a strong contingent of well known artists, such as Lady Bancroft, Mr Charles Wyndham, Mr H B. Irving, Mr Louis Calvert, Miss Esmé Beringer, Miss Mabel Lewis Terry, Mr Cyril Maude, Mrs Tree, and many others no less celebrated, while the opera and concert hall were represented by Mr Joseph Hollman, Miss Marian Mackenzie, Miss Giulia Ravogli, Madame Alice Gomez, Miss Clara Butt, Vladimir de Pachmann, Johannes Wolff, and Madame Norcrosse The highest praise

ference to an exhibition to be held in connexion with the forthcoming Congress on Tuberculosis at Berlin.

4. From Sir Peter Eade with reference to a memorial statue of Sir Thomas Browne which it is proposed to erect by subscription in Norwich.—After some remarks in favour of the project by Sir F. BATEMAN the TREASURER proposed, and Dr. NORMAN MOORE seconded, that the College should subscribe the sum of 15 guineas towards the "Thomas Browne Statue Fund.—Sir F. BATEMAN, on behalf of the Organising Committee, thanked the College for the gift.

5. From a firm of photographic engravers asking permission to photograph the portrait of Dr. Arbuthnot in possession of the College for illustrating a "Cyclopædia of Literary Biographies" to be published by W. and R. Chambers of Edinburgh.—Permission was granted by the College.

The PRESIDENT then dissolved the Committee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

AN ordinary meeting of the Council was held on May 11th, the President, Sir WILLIAM MACCORMAC, Bart., K.C.V.O., being in the chair. The minutes of the previous meeting were confirmed, with the exception that it was decided to leave entirely open the date of the proposed celebration of the centenary of the charter of the College.

Mr. Thomas Frederick Chavasse of Birmingham was introduced and he made the required declaration to be admitted a Fellow of the College.

The Council elected Mr. Pearce Gould a member of the Court of Examiners in the vacancy occasioned by the retirement of Mr. Jeremiah McCarthy.

The Council elected Mr. Henry Morris a member of the Board of Examiners in Dental Surgery (Court of Examiners section) in the vacancy occasioned by the retirement of Mr. Jeremiah McCarthy.

A letter was read from the Solicitor to the College reporting the dismissal of the appeal against the assessment of the College. The letter was considered by the Council and referred to the Finance Committee.

A letter was read from Mr. A. W. FitzRoy, clerk of the Privy Council, forwarding a copy of a letter addressed by the German Ambassador to Lord Salisbury and transmitted by Lord Salisbury to the Lord President of the Council, intimating that in connexion with the forthcoming Congress on Tuberculosis at Berlin it is proposed to hold an exhibition of an international character in the rooms of the "Philharmonie" at Berlin between May 20th and June 18th and asking that the attention of institutions in England interested in the subject may be called to the undertaking.

A letter was read from the Corporate and Medical Reform Association, forwarding a copy of a memorial to the General Medical Council on the subject of illegal certificates of proficiency in departments of medicine, surgery, and midwifery" and other documents relating thereto, and asking the Council to move their representative to support the due discharge of its functions by the (General Medical) Council and the law as now established." The matter was referred to Mr. Thomas Bryant the representative of the College on the General Medical Council, and he was requested to take such action as he should think fit.

The draft of the proposed petition for a supplementary charter for the purpose of conferring diplomas of honorary fellowship was presented and referred to a committee to consider and report.

A HOSPITAL FOR CHILDREN IN SOUTH LONDON

WITH the object of providing increased hospital accommodation for children in the South of London a meeting under the presidency of the Duke of Westminster was held in the Mansion House on May 12th. The existing accommodation in hospitals for children is represented by one cot for 12,550 head of the population on the south side as compared with one cot for 3553 head on the north side of the Thames, and moreover the number of poor in the south is continually increasing. The Governors of the Belgrave Hospital for Children have therefore decided to transfer that institution to Kennington and build a new hospital on a reformed basis as follows:—

1. Stringent precautions will be taken against abuse of the charity. 2. A wage limit will be fixed. 3. Only the children of the really poor will be eligible for treatment. 4. The part-payment system will not be adopted. 5. The number of out-patients will be rigidly limited. 6. The casualty department will be restricted to cases of urgency only. 7. Registers will be kept of all patients, with the means and occupations of the parents. Free access will be given to these registers. 8. The hospital will cooperate with the local practitioners in order to ensure that the above principles shall be fully carried out. 9. Under suitable restrictions local practitioners will be enabled to obtain a consultation opinion on cases brought by them. A different wage limit will be used in such cases and no treatment given.

His Grace, in moving a resolution to the effect that there was urgent need for the increase of hospital accommodation for children in South London, said that the governors of the Belgrave Hospital had decided to transfer the Belgrave Hospital to a site in Kennington. They had obtained promises to the amount of £5000 with which they could make a beginning and eventually he hoped that they would get £50,000 to complete the scheme.

The Bishop of ROCHESTER seconded the motion. He said that he was present rather to set forth the greatness of the need than to represent the origin of the movement. South London was the most needy district in his diocese, but it was marvellous how little was known of the conditions prevailing on the south side of the Thames. They had seen that morning that an American town had been made in a week, and though South London did not increase so fast as that he had been astonished at the complete change which took place in some districts within a few months. The population increased annually by 26,000 as compared with 14,000 in the north, and yet they were not so well provided with hospital accommodation, having only two hospitals as against 11 in North London. If people could only realise the circumstances under which this increase took place, and the sufferings of poor children, no other appeals or arguments would be necessary.

The Rev. BERNARD SNELL supported the motion, which was unanimously carried.

Dr. FARQUHARSON, M.P., in moving a proposal to the effect that that meeting approved of the scheme put forward by the executive committee for the transfer of the Belgrave Hospital to a site already secured in Clapham road, Kennington, said that the medical men in Kennington had cordially welcomed the scheme and had determined to give the new hospital their most loyal support. He had every reason to believe that the hospital when built would become a model one in every respect.

The Hon. EVELYN HUBBARD, M.P., seconded Dr. Farquharson's motion and remarked that the central block of the new buildings including the administrative portion with two floors of wards could be built for £10,000 and the out-patients' department for £5000 so that for £15,000 a good start could be made. Incidentally he remarked that mild pressure would be put upon the Government in order to obtain exemption from rates for hospitals.

Mr. CLINTON T. DENT, F.R.C.S. Eng., supported the motion which was carried, and a vote of thanks to the Chairman and to the Lord Mayor for the use of the Mansion House terminated the proceedings.

THE PREVENTION OF TUBERCULOSIS

(Continued from p. 1315.)

HALIFAX.

A CONFERENCE of Poor-law guardians was held at Halifax on May 12th to consider the treatment of inmates of workhouses suffering from phthisis. Mr. Josiah Wade, the chairman of the Halifax Board of Guardians, presided, and there were a fair number of medical men present including Dr. Dolan of Halifax (medical officer of the Halifax Board of Guardians), Mr. Ainley (medical officer of health of Halifax) and Mr. McCandlish of Leeds. The Chairman explained that the present meeting was virtually due to the persistency with which Dr. Dolan had brought the matter before the board of guardians. Dr. Dolan impressed upon the guardians that disease was the great factor in the production of pauperism. Phthisis could be fought by means of climatic treatment here just as well as on the continent but the

of the Indian Medical Service, three officers who retired from India last year with the Order of Knighthood, and Dr Patrick Manson, the medical adviser to the Colonial Office Great improvements have been made in the conditions of life in some parts of the tropics during recent years From the early days of the British occupation of India until almost the middle of this century the mortality among Europeans was very great There used to be the most astonishing cases of mismanagement and obstinacy on the part of combatant officers who neglected and scorned the advice of their medical officers, while their men died like flies The professor of medicine at Netley had many dreadful stories about the barracks, hospitals, and commanding officers of the pre sanitary period We read of European regiments melting away like the visions of a dream Cases are given where 120 or 130 new recruits were required for a battalion of 1000 men every year to keep up its strength Report after report was sent in by medical officers, but no attention was paid to the matter until the Royal Sanitary Commission sent in its report in 1863 stating that on an average 69 per 1000 Europeans died annually, after which the Government at last took up the matter and the death rate of the troops in India is now not much greater than is that of those in this country In fact India has improved so much as a residence that it does not much differ from Italy and some other parts in the south of Europe In some portions of our tropical possessions things seem not to differ greatly from what they were in India in the early part of this century In certain districts of West Africa the mortality is still very great and Mr Chamberlain, the Colonial Secretary, has arranged that only those medical men who have been specially trained in tropical medicine shall obtain appointments in the Colonial Services In addition to the various colonial appointments there were many openings for medical men where a knowledge of tropical diseases would be useful and it is highly probable that a certificate showing the knowledge of the applicant in such subjects would be required when such appointments were made There are surgeoncies to the railways in India which employ great numbers of persons and are provided with workshops and hospitals European medical men are appointed at all the most important points The emoluments are good and private practice is allowed In the great tea districts on the hills towards the east of India many medical men are required for the care of the European and native employés There was another occupation which many young medical men found extremely pleasant for a time—that of ship surgeon The vessels of the many shipping companies which carry passengers to and from India, China, and Australia might have on board a large number of convalescents from tropical fevers, liver and bowel diseases, some of them sent to sea as a last chance, the patient being certain to die if kept on land Officers proceeding on sick leave from India to Europe were often seriously ill and large numbers of such cases were sent in charge of young and inexperienced medical men in these passenger ships Very often these medical men were alone and must have had some anxiety, as their knowledge of tropical diseases was only that obtainable at the ordinary medical school The practitioner who settles at the Cape, or in China, or in eastern Africa and has to treat a case of tropical abscess, or malignant malarial fever, or beri beri at short notice is apt to find himself at first in some uncertainty

Tropical practice is in many respects extremely interesting There is scarcely a tropical disease regarding which insight is not wanted as regards its pathology The recent plague epidemic has presented many opportunities for research and quite recently most valuable discoveries have been made by Major Ross, I M S, regarding the relation of the mosquito with the parasite of malarial fever Only a year or so ago has the bacterium of yellow fever been discovered and at this moment experiments are being made to try to find a serum which will reduce the mortality of this deadly disease Beri beri, sunstroke, negro lethargy, hæmoglobinuria, Indian non malarial fevers, and numerous others are awaiting the expert with the microscope, for undoubtedly microphytes and microzoa have much to do with tropical diseases

Commenting on the small number of those who make a study of tropical pathology Dr Maconachie reminded his hearers that those of them whose tastes lay in this direction had great opportunities for making a name and at the same time keeping up the reputation of the Aberdeen school The entrance examinations for the Indian Medical Service are not difficult for a fairly well read man and a young surgeon with a good microscope and a knowledge of how to set about work will find his life extremely interesting In the medical services for India and the colonies as well as in the Royal Army Medical Corps, a very large amount of the work is purely hospital work In addition to this there are in India four large medical colleges with a complete staff of professors who in many cases are not allowed to practise A specialist or investigator holding such appointments has therefore, an opportunity to follow his special bent as in this country In India a successful civil surgeon soon makes a reputation and patients flock to his hospital from all parts Some men have removed thousands of cataracts during their service and similarly with regard to urinary calculi In the tropics every surgeon is a physician and every physician is a surgeon, in fact, every man who has a general hospital appointment must be prepared to undertake any medical, surgical, or obstetric case which comes before him In conclusion, Dr Maconachie remarked on the advantages which the Government Medical Services offered to the young practitioner who could not afford to pay a large sum for an introduction to practice, and he made special mention of the greatly improved conditions of the Royal Army Medical Corps, strongly recommending that branch of the Service to those of his hearers whose inclinations lay in that direction

It has been arranged to give a course of 25 lectures on Tropical Medicine with demonstrations by the Professor of Pathology on the various diseased conditions, bacteria, and entozoa applicable to the course Over 30 students have entered their names to attend the class

ROYAL COLLEGE OF PHYSICIANS OF LONDON

AN extraordinary meeting of the Comitia was held on May 11th, Dr CHURCH, President, being in the chair

The PRESIDENT announced that he had appointed Professor Bradbury Croonian Lecturer and that his subject would be "Some Points Connected with Sleep, Sleeplessness, and Narcotics"

The following gentlemen who had been elected Fellows of the College at the previous meeting were duly admitted — Dr William Vicary Snow, Dr Henry Handford, Dr Herbert Ritchie Spencer, Dr Wilfred James Hadley, Dr Cyril Ogle, Dr William Halse Rivers Rivers, Dr William John Ritchie Simpson, Dr Percival Horton Smith, Dr Sydney Arthur Monckton Copeman, and Dr Arthur Ransome

On the nomination of the PRESIDENT Dr Radcliffe Crocker was appointed as the representative of the College to attend an International Conference on the Prevention of Venereal Diseases to be held at Brussels, Sept 4th to Sept 8th A report was received from the Laboratories Committee on April 14th informing the College that they had appointed Dr Cartwright Wood superintendent of the bacteriological department, and that his duties will include the preparation of diphtheria antitoxin and the testing of antitoxic serums sent to the Laboratories —Dr PAYNE, in moving the adoption of the report, explained the great development of this department and the value which it had been to the community —The SENIOR CENSOR (Dr CHEADLE) seconded the motion and it was carried

The following communications were received —

1 From Miss Roberts, offering for the acceptance of the College a portrait of her uncle, the late Sir William Roberts, by G F Watts, R A —The PRESIDENT, in the name of the College, accepted the gift and on the motion of the TREASURER (Sir DYCE DUCKWORTH), seconded by the SENIOR CENSOR, it was resolved to send a letter to Mr Roberts thanking her for her handsome gift. The date of the portrait was about 1870

2 From the executors of the late Dr Hare announcing a bequest by him of £500, free of legacy duty, for the College Endowment Fund —The PRESIDENT commented on the munificence of the gift and the TREASURER, seconded by the SENIOR CENSOR, proposed that a vote of thanks should be sent to Mrs Hare —This was adopted

3 From the Lord President of the Privy Council with

Public Health and Poor Law.

OCAL GOVERNMENT DEPARTMENT

REPORTS OF MEDICAL OFFICERS OF HEALTH

Bromsgrove Urban District—Dr Cameron Kidd, while rning the council of this district against drawing con sions from the statistics of one year, shows them by erence to the figures of the last decade that the work ich they have, under his guidance, carried out has had a rked effect in a reduction of a death rate of 20 2 in the first years of the decade to 16 2 in the second quinquennial iod. In discussing the value of isolation accommodation Kidd points out how that the removal of a first case of ectious disease from a dwelling prevents that saturation of the rooms with infection which is not unlikely to occur m the protracted presence of a patient, more especially such diseases as scarlet fever where the patient is able to ve about freely Dr Kidd refers with much satisfaction to opening of the joint isolation hospital for the districts of omsgrove Droitwich, and Redditch, but we are sorry to see at there has existed a certain amount of prejudice against institution, so much so indeed that Dr Kidd has deter- ned, so far as an attack upon the administration of the spital involves him personally, to vindicate himself in a urt of law The management of a fever hospital is always difficult task, the duty being rendered doubly onerous ien attempts are made to damage the position of a medical an of such high professional attainments as Dr Cameron dd, and it is to be hoped that his action will have a good ect upon those who think that a medical man may be acked with impunity The new glycerinated calf lymph spoken of very highly by Dr Kidd He remarks that ile the lymph affords a "practically certain immunity m the accidental introduction of disease of any kind, it s also greatly diminished the severity of the local effects vaccination itself, indeed, it is surprising to anyone customed to the old fashioned vaccination to see the mild- ss of the symptoms produced by the use of this lymph—an nost complete absence of surrounding inflammation is now e rule rather than the exception."

Whitechapel Sanitary District—The Jewish Board of uardians have in this district recently given further idence of their desire where possible to further sanitary form and they have after inquiry directed that when a tient receives relief from the board of guardians the spector appointed by this body shall disinfect all rooms ich patients with phthisis have inhabited The officers of e sanitary authority are able, Mr Joseph Loane reports, to rk very smoothly with the Jewish inspector

Surbiton Urban District—Dr Owen Coleman has clearly t little sympathy with those who yield to the preju- ces of patients by vaccinating by means of one inser- n alone In the course of some observations on this bject Dr Coleman remarks "If he [the medical man] lieves in vaccination let him do it as he knows it should done, or let him say he does not believe in it and decline have a hand in it But to vaccinate in *one* spot and to n a certificate that a child is thereby successfully (and implication efficiently) vaccinated, may be an easy atter to reconcile with his conscience and his duty to s patient since the parent is presumably a consent- g party, but it is another matter if he conceive has done his duty by his countrymen and women s thereby assists very materially in bringing discredit vaccination in the eyes of the ignorant and unthink- g as a protective against small pox. Such a child *not* efficiently protected but goes out into the world as if were, and later on possibly contracts the disease and pears in the returns amongst numbers of similar cases as aving contracted small pox though successfully vacci ted'" We have quoted Dr Coleman's comments in full cause they are so much to the point at the present time hen an attempt is doubtless being made to bring future scredit upon vaccination by performing the operation in- ficiently and placing the patient in a position of false curity The anti vaccinationist will welcome the prevalence inefficient vaccination because it is certainly calculated further his ends There is, indeed, very much force in r Coleman s position when he advocates one of two courses —i e., either vaccination properly performed or a certificate of conscientious objection No half measures. Let us have the vaccinated properly vaccinated and the unvaccinated *registered as such*

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 6637 births and 3876 deaths were registered during the week ending May 13th The annual rate of mortality in these towns, which had declined in the six preceding weeks from 23 1 to 16 5 per 1000, rose again last week to 17 7 In London the rate was 16 4 per 1000, while it averaged 18 6 in the 32 provincial towns The lowest rates in these towns were 11 1 in West Ham, 12 2 in Gateshead, 12 9 in Norwich, and 13 1 in Swansea, the highest rates were 22 9 in Wolverhampton 24 9 in Manchester, 25 6 in Liverpool, and 26 8 in Salford The 3876 deaths included 365 which were referred to the principal zymotic diseases, against 383 and 339 in the two preceding weeks, of these, 106 resulted from measles, 98 from whooping cough, 82 from diphtheria, 30 from diarrhœa, 26 from "fever," principally enteric, 22 from scarlet fever, and one from small pox The lowest death rates from these diseases were recorded in Croydon, Brighton, and Bristol, and the highest rates in Leicester, Manchester, Salford, and Burnley The greatest mortality from measles occurred in Manchester and Salford, from scarlet fever in Bradford, and from whooping cough in Plymouth, Cardiff, Birkenhead, Burnley, and Hull. The mortality from "fever" showed no marked excess in any of the large towns The 82 deaths from diphtheria included 40 in London, eight in Leicester, five in Liverpool, four in West Ham, four in Leeds, three in Salford, three in Burnley, and three in Sheffield One fatal case of small pox was registered in Hull, but not one in any other of the 33 large towns, and no small-pox patients were under treatment last week in any of the Metropolitan Asylums Hospitals The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2210, against 2131, 2139, and 2210 on the three preceding Saturdays, 259 new cases were admitted during the week, against 189, 226, and 219 in the three preceding weeks The deaths referred to diseases of the respiratory organs in London, which had been 294 and 251 in the two preceding weeks, rose again last week to 257, but were 53 below the average The causes of 53, or 1 4 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in Cardiff, Leicester, Bolton Newcastle-upon-Tyne, and in 12 other smaller towns The largest proportions of uncertified deaths were registered in West Ham, Portsmouth, Liverpool, Blackburn, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had beeen 21 1 and 18 5 per 1000 in the two preceding weeks was again 18 5 during the week ending May 13th and exceeded by 0 8 per 1000 the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 11 8 in Perth and 13 7 in Greenock to 19 1 in Glasgow and 22 2 in Dundee The 565 deaths in these towns included 27 which were referred to measles, 10 to whooping-cough six to diphtheria, four to diarrhœa, three to "fever," and three to scarlet fever In all, 53 deaths resulted from these principal zymotic diseases against 76 and 52 in the two preceding weeks These 53 deaths were equal to an annual rate of 1 8 per 1000 which slightly exceeded the mean rate last week from the same diseases in the 33 large English towns The fatal cases of measles, which had been 30 and 16 in the two preceding weeks, rose again to 27 last week, of which 20 occurred in Glasgow and four in Aberdeen The 10 deaths referred to whooping cough showed a further decline from the numbers recorded in recent weeks, and included three in Edinburgh, two in Glasgow, and two in Dundee. The fatal cases of diphtheria, which had been three and five in the two preceding weeks, further rose to six last week, of which three occurred in Glasgow The three deaths from scarlet fever corresponded with the number recorded in the preceding week, and included two in Edin burgh Of the three deaths referred to different forms of

matter was one for the municipality Mr McCandlish, speaking for Leeds, said that any scheme brought forward should receive his colleagues' hearty coöperation Mr F H Bentham of Bradford brought forward a motion expressing the opinion that phthisical inmates of workhouses should be treated elsewhere than in workhouses or infirmaries, and asking boards of guardians to consider the question with a view to providing isolated hospitals The motion was carried

SHEFFIELD

On May 10th there was held a large and important meeting in the banqueting room of the Cutlers' Hall with a view to establish a branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis. The Lord Mayor was in the chair and was supported by Sir William Broadbent, the chairman of the Organising Committee of the Association, and Professor Clifford Allbutt The Chairman explained the objects of the meeting and the importance of the movement Sir William Broadbent gave an account of the origin of the Association, its objects, the various criticisms to which it had been subjected, the nature of predisposition to tuberculosis, and the benefits of the movement Professor Clifford Allbutt who followed spoke of the value of prevention in medicine and the exceeding importance of comparative pathology Dr Dyson proposed the first motion affirming the formation of a branch and this being duly carried another was moved by Alderman W K Carter which dealt with the organisation of the branch After this had been carried the usual votes of thanks were passed and a special tribute of thanks was paid by the Lord Mayor to Dr D Burgess, the local honorary secretary, to whose labours the success of the meeting was in great measure due

PORTSEA

A discussion took place at the meeting of the Portsea Board of Guardians which was held on March 29th The discussion arose out of the consideration of the report of the special Infirmary Committee appointed to examine into "the best means of treating our consumptives and other cases of tuberculous disease by the modern fresh air treatment" The report pointed out that the committee were quite convinced of the efficacy of the fresh air treatment as carried out at Ventnor and that although they could not expect the same success with ordinary infirmary patients as with the selected patients at Ventnor, yet they thought that great benefit would accrue by making certain structural alterations in the Portsea Infirmary These were, shortly, making the windows larger and putting up a verandah —Mr H P Gaston, after speaking on the importance of fresh air and light, moved the adoption of the report As for the erection of a sanatorium, that was a matter for the town council. The report was eventually adopted

THE CASE OF HUNTER v CLARE

WE have received the following appeal through Mr Rivers Willson from the committee who are raising a fund in behalf of the widow of the late Mr H K Hunter —

The committee earnestly desire to draw the attention of members of the medical profession to the sad case of Mr Herbert Kingsley Hunter, who died suddenly on July 19th, 1898, at Gamlingay, at the early age of 30 years, leaving a widow totally unprovided for The committee think that this case specially calls for the support of the profession, not only to relieve the sad condition of the widow, but also to serve as an expression of opinion on their part against the treatment Mr Hunter received and which there is only too good reason to believe led to his fatal attack

The facts are briefly as follows —A few years ago Mr Hunter, after receiving his medical education in this country, went to Pennsylvania with his wife with the intention of settling and practising there He entered as a student at Jefferson's College, Philadelphia, a recognised State University, and after passing through the ordinary curriculum graduated as M D Shortly afterwards, owing to domestic reasons, he was compelled to return to England and to take steps to qualify himself to practise in this country Accordingly he acquired the diploma of the London Society of Apothecaries and having become a registered medical practitioner bought a practice at Gamlingay, in the county of Cambridgeshire He soon became popular and had every chance of a prosperous career, but complaints were made against him before the General Medical Council (1) that he called himself "Dr" on the strength of an American degree, (2) that he made use of the style "Physician and Surgeon," being only a Licentiate of the Society of Apothecaries. In consequence of representations from the General Medical Council Mr Hunter agreed to make no further use of his degree, and asked the Council what title he should use to indicate he was lawfully qualified to practise medicine and surgery That body refused to advise and Mr Hunter thought the matter was at an end. Great was his consternation when one day he received a summons to attend before the petty sessions at Caxton in consequence of a prosecution instituted by the General Medical Council So profound was the shock that he was taken ill the same day with cardiac symptoms, from which he had never before suffered At the petty sessions he was convicted by the justices of "wilfully and falsely" styling himself a "physician," but at this stage the Society of Apothecaries intervened on his behalf and appealed to the Divisional Court of Queen's Bench It may be stated, however, that all the cost of the trial before the magistrates had to be defrayed by Mr Hunter himself, and the whole matter tended greatly to injure his practice, for it was reported throughout his neighbourhood that he was an American quack, the action of the General Medical Council could not but appear to corroborate popular rumour that he was an unqualified practitioner Before the appeal came on in London Mr Hunter, returning home after a hard day's work, had a recurrence of the symptoms which had first manifested themselves on the receipt of the original summons and died quite suddenly A report was immediately circulated that he had committed suicide, but Mrs Hunter acted promptly by sending at once to Cambridge for medical assistance and a post-mortem examination annihilated the cruel libel

The result of the trial before Justices Lawrance and Channell is well known and until the decision there given is reversed, or fresh legislation has abrogated it, it would appear that medical men, lawfully qualified to act in every respect as surgeons and physicians, may be prosecuted and fined for calling themselves such The decision is a far reaching one, for not only are all Licentiates of the Society of Apothecaries subject to this penalty, but medical and surgical graduates of our universities are equally involved. For if there is any meaning in the decision of the Divisional Court, it is that the titles "Physician and Surgeon" are at law rigidly restricted to Fellows, Members, and Licentiates of a College of Physicians or Surgeons respectively

Under these circumstances it seems to the committee that important principles are at stake, affecting the well being of a large portion of the profession and that the Hunter Fund is deserving of every possible support, if for no other reason than as a practical protest against the present iniquitous state of the law as shown by the recent trial at the Royal Courts of Justice

ALFRED GEORGE BATEMAN, M B
MAJOR GREENWOOD, M D, LL B, Barrister-at-Law
RIVERS WILLSON, Ph D, L S A Lond.
G JACKSON, F R C S Eng
M CURSHAM CORNER, M and L S A Lond
JOSEPH SMITH, Pres Soc of Members R C S, M R C S, L S A, D P H Camb
R REGINALD SLEMAN, M A Camb, L S A Lond
} Committee

LONDON SCHOOL OF MEDICINE FOR WOMEN—A dog show will be held on June 3rd at the London (Royal Free Hospital) School of Medicine for Women, 8, Hunter street, Brunswick square, W C Only qualified practitioners, members of the teaching staffs at the medical schools, and medical students may exhibit The committee has made arrangements to include as eligible dogs belonging to members of the families of the above. The show which has been licensed under the Kennel Club will last one day, closing at 7 P M The judging will begin at 1 30 P M 26 classes have been provided, three prizes are offered in each class and a large number of special prizes have been offered Capts Barry, Mr E W Allen, and Mr G R Krehl has kindly volunteered their services as judges The proceeds are to be devoted to the building fund of the school

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Bromsgrove Urban District—Dr Cameron Kidd, while warning the council of this district against drawing conclusions from the statistics of one year, shows them by reference to the figures of the last decade that the work which they have, under his guidance, carried out has had a marked effect in a reduction of a death rate of 20 2 in the first five years of the decade to 16 2 in the second quinquennial period. In discussing the value of isolation accommodation Dr Kidd points out how that the removal of a first case of infectious disease from a dwelling prevents that saturation of all the rooms with infection which is not unlikely to occur from the protracted presence of a patient, more especially in such diseases as scarlet fever where the patient is able to move about freely Dr Kidd refers with much satisfation to the opening of the joint isolation hospital for the districts of Bromsgrove Droitwich, and Redditch, but we are sorry to see that there has existed a certain amount of prejudice against the institution, so much so indeed that Dr Kidd has determined, so far as an attack upon the administration of the hospital involves him personally, to vindicate himself in a court of law The management of a fever hospital is always a difficult task the duty being rendered doubly onerous when attempts are made to damage the position of a medical man of such high professional attainments as Dr Cameron Kidd, and it is to be hoped that his action will have a good effect upon those who think that a medical man may be attacked with impunity The new glycerinated calf lymph is spoken of very highly by Dr Kidd He remarks that while the lymph affords a 'practically certain immunity from the accidental introduction of disease of any kind, it has also greatly diminished the severity of the local effects of vaccination itself, indeed, it is surprising to anyone accustomed to the old fashioned vaccination to see the mildness of the symptoms produced by the use of this lymph—an almost complete absence of surrounding inflammation is now the rule rather than the exception."

Whitechapel Sanitary District—The Jewish Board of Guardians have in this district recently given further evidence of their desire where possible to further sanitary reform and they have after inquiry directed that when a patient receives relief from the board of guardians the inspector appointed by this body shall disinfect all rooms which patients with phthisis have inhabited The officers of the sanitary authority are able, Mr Joseph Leane reports, to work very smoothly with the Jewish inspector

Surbiton Urban District—Dr Owen Coleman has clearly put little sympathy with those who yield to the prejudices of patients by vaccinating by means of one insertion alone In the course of some observations on this subject Dr Coleman remarks 'If he [the medical man] believes in vaccination let him do it as he knows it should be done, or let him say he does not believe in it and decline to have a hand in it But to vaccinate in *one* spot and to sign a certificate that a child is thereby successfully (and by implication efficiently) vaccinated may be an easy matter to reconcile with his conscience and his duty to his patient since the parent is presumably a consenting party, but it is another matter if he conceive he has done his duty by his countrymen and women. He thereby assists very materially in bringing discredit on vaccination in the eyes of the ignorant and unthinking as a protective against small pox. Such a child is *not* efficiently protected but goes out into the world as if it were and later on possibly contracts the disease and appears in the returns amongst numbers of similar cases as having contracted small pox though successfully vaccinated'" We have quoted Dr Coleman's comments in full because they are so much to the point at the present time when an attempt is doubtless being made to bring future discredit upon vaccination by performing the operation inefficiently and placing the patient in a position of false security The anti vaccinationist will welcome the prevalence of inefficient vaccination because it is certainly calculated to further his ends. There is, indeed, very much force in Dr Coleman's position when he advocates one of two courses—i e, either vaccination properly performed or a certificate of conscientious objection No half measures. Let us have the vaccinated properly vaccinated and the unvaccinated registered as such

VITAL STATISTICS

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HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had beeen 21 1 and 18 5 per 1000 in the two preceding weeks was again 18 5 during the week ending May 13th and exceeded by 0·8 per 1000 the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 11 8 in Perth and 13 7 in Greenock to 19 1 in Glasgow and 22 2 in Dundee. The 565 deaths in these towns included 27 which were referred to measles, 10 to whooping-cough, six to diphtheria, four to diarrhœa, three to "fever,' and three to scarlet fever In all, 53 deaths resulted from these principal zymotic diseases against 76 and 52 in the two preceding weeks These 53 deaths were equal to an annual rate of 1 8 per 1000, which slightly exceeded the mean rate last week from the same diseases in the 33 large English towns The fatal cases of measles, which had been 30 and 16 in the two preceding weeks rose again to 27 last week, of which 20 occurred in Glasgow and four in Aberdeen The 10 deaths referred to whooping cough showed a further decline from the numbers recorded in recent weeks, and included three in Edinburgh, two in Glasgow and two in Dundee. The fatal cases of diphtheria, which had been three and five in the two preceding weeks further rose to six last week, of which three occurred in Glasgow The three deaths from scarlet fever corresponded with the number recorded in the preceding week, and included two in Edinburgh. Of the three deaths referred to different forms of

"fever," two were registered in Glasgow The deaths from diseases of the respiratory organs in these towns, which had been 117 and 109 in the two preceding weeks further fell to 97 last week, and were 12 below the number in the corresponding period of last year The causes of 21, or nearly 4 per cent, of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death rate in Dublin, which had declined in the four preceding weeks from 33 4 to 24 8 per 1000, rose again to 26 7 during the week ending May 13th During the past four weeks the rate of mortality in the city has averaged 27 8 per 1000, the rate during the same period being 16 6 in London and 17 6 in Edinburgh The 179 deaths registered in Dublin during the week under notice showed an increase of 13 upon the number in the preceding week, and included eight which were referred to the principal zymotic diseases, against 12 and seven in the two preceding weeks, of these three resulted from "fever," two from scarlet fever, two from whooping cough, and one from diphtheria, but not one either from small-pox, measles, or diarrhœa These eight deaths were equal to an annual rate of 1 2 per 1000, the zymotic death rate during the same period being 1 7 both in London and in Edinburgh The deaths referred to different forms of "fever," which had been three and two in the two preceding weeks, rose again to three last week The two fatal cases of scarlet fever exceeded the number recorded in any week since the end of March last The two deaths from whooping cough showed a further decline from the numbers returned in recent weeks, while the mortality from diphtheria corresponded with that recorded in the preceding week The 179 deaths in Dublin last week included 26 of infants under one year of age and 63 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons considerably exceeded the number recorded in the preceding week Seven inquest cases and six deaths from violence were registered, and 74, or more than a third, of the deaths occurred in public institutions The causes of 11, or more than 6 per cent, of the deaths in the city last week were not certified

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

THE following appointments are announced —Surgeons D J O'Malley to the *Dido* and H W M Rees to the *Wellington* for the *Jaseur*

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonel R W Mapleton acts as Principal Medical Officer, North Eastern District, until further orders Major A P O Connor has embarked for South Africa, and Major T P Woodhouse has arrived in the Eastern District for duty Captain E M Pilcher has joined at the Royal Arsenal for duty Lieutenant J M Sloan has assumed Medical Charge of the field hospital and troops at Barry Camp

INDIA AND THE INDIAN MEDICAL SERVICES

The services of Major R J Windle, R A M C, are placed temporarily at the disposal of the Government of Bombay for employment on plague duty Captain J C Lamont (Bengal), Professor of Anatomy, Lahore Medical College, is granted furlough out of India for eight months Captain H G Melville (Bengal) is appointed to officiate as Professor of Anatomy, Lahore Medical College, until further orders. The services of the undermentioned officers are placed temporarily at the disposal of the Government of the North Western Provinces and Oudh for employment on plague duty Captain Merewether, 7th Bengal Cavalry, Captain Grant, 2nd Battalion 4th Gurkhas, Captain Stanton, 3rd Bengal Infantry, Captain Maxwell, 16th Bengal Cavalry, Lieutenant Hill, 34th Pioneers, Lieutenant Wheeler 28th Punjab Infantry, Lieutenant McK T Hogg, 9th Gurkha Rifles, Lieutenant Preston, 40th Pathans, Lieutenant Sproule, 1st Bengal Lancers, and Lieutenant Barry, 2nd Bengal Infantry The services of Lieutenant-Colonel A Deane (Bengal) are replaced at the disposal of the Foreign Department Lieutenant Colonel Scott Reid goes as Administrative Medical Officer to the Central Provinces, relieving Colonel Hutcheson, who takes up his substantive appointment at Allahabad as Inspector General of Civil Hospitals North-Western Provinces and Oudh The Queen has approved of the retirement from the service of the under mentioned officers —Major Louis Tarleton Young, Bengal Establishment, and Lieutenant-Colonel William Henry Thornhill, Madras Establishment (post-dated to April 9th, 1899)

ARMY MEDICAL RESERVE OF OFFICERS

Surgeon Captain Charles H Gough Derbyshire Yeomanry Cavalry, to be Surgeon Major, Surgeon Lieutenant A Phillips to be Surgeon Captain

YEOMANRY CAVALRY

Wiltshire (Prince of Wales's Own Royal Regiment) Surgeon Lieutenant E Kingscote to be Surgeon Captain

VOLUNTEER CORPS

Rifle 3rd Volunteer Battalion the Queen's (Royal West Surrey Regiment) Surgeon Lieutenant Josiah Field Hall resigns his commission and is appointed Second Lieutenant 1st (Brecknockshire) Volunteer Battalion the South Wales Borderers Brigade Surgeon Lieutenant Colonel C P Skrimshire resigns his commission, also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement, vacating thereby his appointment as Senior Medical Officer to the South Wales Volunteer Infantry Brigade 2nd Volunteer Battalion the Welsh Regiment William Frederick Brook to be Surgeon-Lieutenant 1st Tower Hamlets Charles Ayton Marrett to be Surgeon-Lieutenant

RECRUITS' TEETH

We lately reported in our Parliamentary Intelligence[1] that 1767 recruits otherwise up to the standard physically were rejected last year on account of "loss or decay of many teeth" It seems a pity that the services of these young men who are ready and willing to become soldiers should be lost to the country in consequence of a perfectly remediable disability The causes which conduce to bad teeth are not very well understood, but it seems tolerably certain that they may co-exist with what is commonly called a sound constitution The fact of a youth being the subject of premature dental decay does not *per se* detract from his expectation of life Provided he can masticate his food he should have as good a chance of reaching to old age as any of his contemporaries whose teeth remain intact In cases where there is nothing else amiss with a recruit it would therefore, we should imagine, be worth while for the State to supply his deficiencies The gain to the individual would be enormous, while the cost to the public purse would be but trifling In addition to the initial outlay for false teeth and sets of teeth the Government would have to maintain dentists at all large stations at home and abroad, but as it is the need for skilled aid of this description is a crying one Military surgeons cannot be expected to excel in mechanical dentistry

The Queen has given to each of the under mentioned officers in Her Majesty's Army Her Royal licence and authority to wear the Insignia of the Imperial Order of the Osmanieh or of the Medjidieh, as stated below, in recognition of their services in Egypt and the Soudan during the recent campaign —The Order of the Medjidieh of the Second Class Surgeon General William Taylor, Medical Staff The Order of the Medjidieh of the Third Class Lieutenant-Colonel Arthur Thomas Sloggett, R A M C The Order of the Osmanieh of the Fourth Class Captain Philip Henry Whiston R A M C The Order of the Medjidieh of the Fourth Class Captain James Willes Jennings, R A M C, and Captain Henry Nason Dunn, R A M C

The War Office has decided that the unvaccinated wife or children of a soldier cannot be allowed to live in barracks or be conveyed to any foreign station at the public expense.

[1] THE LANCET April 29th 1899

VACCINATION PROSECUTION — At Exeter on May 12th a man who refused to pay a fine was sentenced to one month's imprisonment for non compliance with an order to have his child vaccinated The chairman of the magistrates remarked that it was for the good of the children and for the good of the country that they should be vaccinated

Correspondence.

"Audi alteram partem."

"ASTHMA IN RELATION TO DISEASES OF THE UPPER AIR PASSAGES"

To the Editors of THE LANCET

SIRS—The discussion on this subject at the Laryngological Society of London will have been useful if it has done nothing more than elicit the interesting letter in THE LANCET of May 13th from Mr Armstrong pointing out the connexion between gout and asthma I am fully convinced of this connexion and I had prepared notes on this point for the discussion, but as chairman I waited until the end The last speaker did not finish until past seven the hour for adjournment, so I was compelled to call upon the openers of the discussion to reply without saying more than a few words If I had had the opportunity I would have insisted on the importance of recognising the threefold origin of asthma 1 The diathesis of the individual, in many asthmatics gouty symptoms are met with and many of the sufferers are neurotic 2 Some morbid condition of the mucous membrane of the respiratory tract 3 The direct exciting cause—i e. the pollen of certain grasses, ipecacuanha, and certain odours, as of horses and cats

In bronchial asthma the condition of the digestive tract also requires careful consideration From my experience in the treatment of hay fever and asthma I am convinced of the necessity of paying attention to all the factors concerned in the production of the asthmatic state. Indeed, I regard asthma as nothing more or less than a symptom, and before any treatment is undertaken the cause of it should be investigated It is only by the judicious combination of general and local treatment that we must look to relieve our patients of one of the most distressing complaints to which flesh is heir

I am, Sirs, yours faithfully,

F DE HAVILLAND HALL

Wimpole-street W., May 13th, 1899

"THE PATHOLOGY OF THE PERICARDIUM"

To the Editors of THE LANCET

SIRS—Dr Harry Campbell in THE LANCET of April 29th, 1899 criticises my paper on 'Certain Points in the Pathology of the Pericardium" published in THE LANCET of April 22nd 1899 As the title implied, my paper was upon the pericardium and the respiratory vascular pump was only introduced to show the place of the pericardium in the general venous circulation In the *Journal of Physiology*, 1897, will be found a paper by Leonard Hill and myself devoted to the vascular functions of respiration and in that fuller account Dr Campbell will find several of his questions answered by actual experiment

By Section 1 of his letter Dr Campbell would appear to imply that Leonard Hill and I claimed originality for the remarks which I made on the vascular functions of respiration The fact that the respiratory movements assisted the circulation was not only taught by Cohnheim and before him but finds a place in elementary text-books of physiology We do however, believe that we were the first to demonstrate that the respiratory and other movements of skeletal muscles play well nigh as essential a part as the heart in the circulation of the blood and that in the erect position the circulation cannot be carried on continuously without such contractions of skeletal muscles, and this is all that was claimed as original in my paper

Dr Campbell is of opinion that under ordinary circumstances respiratory movements do not aid the circulation to an appreciable extent Respiratory waves appear on nearly every trace of a blood pressure experiment even during quiet breathing, and when it is considered that during deep respiration in man the negative pressure of the thorax varies from − 1 to 2 mm Hg in expiration to − 30 mm Hg during inspiration it must be admitted that the thorax must exert a very considerable pumping action on the blood The blood tends to be sucked into the lungs during inspiration, whilst the rise of pressure during expiration passes it on to the left heart as the way to the veins is barred by the pulmonary semilunar valves A constant negative pressure, such as Dr Campbell supposes, can no more be maintained in the pulmonary vessels when the capacity of the thorax is increased for a considerable time than it can in the alveoli The air tends to flow into the alveoli and the blood into the pulmonary vessels until equilibrium is once more established and then further flow arising from the increased size of the thorax ceases Where, however, the intra thoracic pressure oscillates the blood is sucked in when the pressure is low and pushed on as the pressure rises, for the valves prevent regurgitation In short, in a system provided with valves a periodic change of pressure at any part will produce a flow along the system in the direction of the valves

In Section 3 of his letter Dr Campbell states that I contend that the expiratory act favours the pulmonary circulation It is not expiration by itself which favours pulmonary circulation but expiration after inspiration has sucked blood into the lungs Hill and I have carried on the circulation of an animal (after the heart had stopped) by rhythmic and alternate compression of the abdomen and thorax

Dr Campbell states that "in such athletic exercises as running the mean size of the chest is increased—inspirations being full and expirations shallow—and as breathlessness increases the latter becomes shorter than the former" Dr Campbell here describes the condition which follows excessive and unvonted exercise in an untrained person whose heart and respiratory vascular pump fail I can positively state that in a well trained cross country runner whose heart and respiratory pump are efficient for the exercise he undertakes inspirations are profound and expirations complete The air exchange at each respiration is maximal At the same time, I infer a maximum wave of blood is inspired from the abdominal veins to meet the air in the lungs and is expired into the left ventricle and aorta In such a runner it will be found that the abdominal wall contracts and hardens with each *inspiration* (Section 5 of Dr Campbell's letter) This reversal during exercise of the usual inspiratory condition of the abdominal wall is an observation, not a deduction. It may also be observed when a fall of blood pressure is produced in an animal in the erect position and in cases of pericarditis with effusion

(Section 4 of Dr Campbell's letter) Rhythmic descent of the diaphragm would push the liver in front of it without compressing it were it not more or less resisted by the remainder of the "muscular sphere" containing the great veins of the abdomen[1] As it is the muscular sphere encloses and compresses 1 The portal vein and its radicals emptying the blood through the liver into the hepatic veins which it will be remembered open practically at the orifice in the diaphragm for the inferior vena cava The blood cannot return to the mesenteric arteries against arterial pressure I have shown[2] that the pressure exerted is amply sufficient to empty the portal vein through the liver at each contraction of the muscular sphere 2 The blood which reaches the capacious inferior vena cava from the legs is simultaneously pressed up into the right heart whence it cannot return when once past the tricuspid valve Reflux to the legs is prevented by the valves in the femoral veins.

I trust that these remarks may satisfactorily clear up the obscure passages in my paper

I am, Sirs, yours faithfully

Finsbury square May 10th, 1899. HAROLD L BARNARD

"A CONTRIBUTION TO THE ANATOMY OF THE PERITONEUM"

To the Editors of THE LANCET

SIRS,—I have read with considerable interest the article under the above title in THE LANCET of May 13th

Case 1 is, I presume, that described by Mr Mansell Moullin in a clinical lecture reported in THE LANCET of April 1st as a hernia into the "post-cæcal" pouch As Mr Keith points out it is undoubtedly a case of hernia into the fossa iliaco subfascialis (the fossa of Bleslادecki) This form of hernia is exceedingly rare. So far as I am aware only two previous cases are recorded The first is described in a most meagre and unsatisfactory manner by Engel

[1] See figure, THE LANCET, April 22nd, 1899.
[2] Proceedings of the Physiological Society, 1898.

who pronounced it to be one of 'retro-cæcal' hernia Leichtenstern, with whom I agree, looks upon it as a hernia into the fossa of Biesiadecki The second case was shown at the Pathological Society in 1889 by Dr Mott The specimen was examined and the diagnosis was verified by Mr Treves

With regard to Case 2 I am inclined to agree with Mr Keith that this is an example of right duodenal hernia occurring into the fossa to which I have given the name "fossa of Waldeyer" The mention of two most important points is omitted from Dr Smith's description One refers to the position of the superior mesenteric artery and the other to the condition of the upper end of the jejunum As I have shown elsewhere,[1] the fossa of Waldeyer, into which a right duodenal hernia occurs, is invariably bounded in front by the superior mesenteric artery In the neck of the sac of this form of hernia, therefore, the artery (or its continuation the ileo-colic in the case of large sacs) always lies When the sac in its enlargement reaches the ascending colon one of two things may happen The colon may be pushed to the right and backward, as in a case recorded by Gerard Marchant, or the sac may pass behind and appear on the outer side of the colon and there enlarging further may push the colon downwards and inwards to the middle line, as in Brösike's case and in Case 2 (In my work on Retro peritoneal Hernia illustrations 18 and 19 show these dispositions of the colon) The second point omitted in Dr Smith's description has reference to the condition of the upper few inches of the jejunum In one-half of the recorded cases of right duodenal hernia there was an adhesion of the jejunum to the anterior surface of the lumbar vertebræ Such adhesion was present in two of Brösike's cases and he over hastily concluded that it was essential to the production of a "parajejunal fossa," which formed the sac of the hernia This "parajejunal fossa," however, I have shown to be nothing else than the fossa of Waldeyer under slightly altered circumstances The fact of the existence of this adhesion in half of the recorded cases makes it necessary to describe two forms of right duodenal hernia—a "hernia mesenterico-parietalis para *duodenalis*" and a "hernia mesenterico-parietalis para *jejunalis*

Specimen 1084 in the Guy's Hospital Museum is a very beautiful example of a right duodenal hernia It is from a case of Dr Moxon's and was described in the Guy's Hospital Reports, vol xvi, 1871, p 131, by Dr Pye-Smith A specimen in the St Mary's Hospital Museum was described in the Transactions of the Pathological Society of London, vol lx, 1893, page 67, by Mr Jackson Clarke It was removed from a patient under the care of Mr Page So far as I have been able to ascertain, these two and a specimen shown by me in my "Arris and Gale" lectures are the only ones in existence in England

If Mr Keith will be good enough to report upon the two points which I have mentioned I am sure that the work of future commentators will be much facilitated

I am, Sirs, yours faithfully,

Leeds, May 13th, 1899 B G A MOYNIHAN

MALIGNANT PIGMENTED TUMOURS

To the Editors of THE LANCET

SIRS,—Dr Rolleston in his most interesting lecture on "Secondary Melanotic Sarcoma of the Liver" published in THE LANCET of May 13th touches on many points of the greatest pathological interest One cannot, however, help being struck by the fact that though he has carefully summarised the present state of our knowledge of the subject of primary pigmented tumours the most important links of the chain are yet wanting and really very little is definitely known of their true nature The explanation of this is, I suppose, that until quite recently all pigmented tumours running a malignant course were believed to be sarcomatous and mesoblastic in origin Recent observation has done much to disprove this The two most usual situations for melanotic tumours to occur in are the skin and the eyeball We now know that of those originating in the skin, some are sarcomata, others are carcinomata, while yet others appear to be intermediate between the two, possibly consisting of cells which in development have never become differentiated and cannot be said to belong definitely to epiblast or hypoblast

In melanotic carcinoma the cells lining the walls of the alveoli are often so distinctly columnar in form and arranged side by side, that their epithelial character cannot be doubted Clinically the distinction between the two is very marked In sarcoma the primary growth is not as a rule very large, it is frequently distinctly encapsuled and is not prone to early ulceration The rapid infection of the lymphatic glands and dissemination of the secondary growths throughout the body while the primary growth is yet small is notorious The prognosis is very bad, so bad that, according to Erichsen, if the primary growth has attained the size of a filbert no local treatment can cure the patient although by relieving him of one source of infection it may retard death In melanotic epithelioma the longer duration and slower progress of the growth, the early ulceration, the diffused brown pigmentation of the skin, and the late appearance of glandular and visceral infection by secondary growths, are leading characteristics

Dr Rolleston, dealing with this point, says "It is not, as far as can be seen at present, a matter of any great clinical importance what the exact structure of a malignant melanoma is, though more careful classification in the future might be expected to show that there was some difference in the rapidity of generalisation" I would venture to differ from this and to suggest that the character of the growth would very materially affect the gravity of the prognosis The reported cases of melanotic epithelioma show that the tendency to glandular and visceral infection is very much less and that early and complete removal ought to give a fair chance of recovery without subsequent recurrence

There is one point of some interest to which I would refer Mixed with the tumours and nodules in melanotic sarcoma there are sometimes black spots or patches which look as though they were mere deposits of pigment without any new growth, such are seen in the mucous membrane of the stomach, renal pelvis, and bladder Lücke says that a careful examination always reveals the presence of cells in spots thus affected, but Thiersch relates a case of melanotic carcinoma of the skin in which at certain points nothing could be discovered but a diffused brown staining of papillæ the texture of which was perfectly normal I suppose that in Dr Wickham Legg's case the dark appearance of the face suggesting argyrism was due simply to this staining of the papillæ It is common knowledge that the distribution of pigment in these growths is very capricious The melanin particles are lodged in and among not only the characteristic cells of the tumour, but in and among those of its fibrous matrix and even in the walls of its vessels It would be most interesting to know whether there is any clinical distinction with regard to intra ocular melanomata The majority of these growths are undoubtedly sarcomata arising from the uveal tract, but a few have been shown to be carcinomata taking origin from the epithelium of the ciliary glands The other regions of the body where primary pigmented malignant growths have been described as occurring are the gums, rectum liver, lymphatic glands and, according to Virchow, the adrenals and vesiculæ seminales I have little doubt that as our knowledge of these tumours progresses and every pigmented new growth is subjected to a searching and critical examination melanotic carcinomata will be found to be of more frequent occurrence among melanomata than is at present supposed

I am, Sirs, yours faithfully,

Leicester May 14th, 1899 GEORGE A CLARKSON

"MATE OR PARAGUAY TEA"

To the Editors of THE LANCET

SIRS,—I have read with much interest Dr Gordon Sharp's article on Maté in THE LANCET of April 1st Having lived for some years amongst the gauchos of Argentina—the maté drinkers *par excellence*—and having in my time consumed much maté myself I venture to dispute some of the conclusions and somewhat hasty generalisations, as they appear to me, arrived at by him after an experience with the herb of but one week only during which time, moreover, he drank it prepared in a quite unusual manner and in conjunction with other ingredients not in themselves always easy of digestion, and added to the maté in proportions which are not stated According to Dr Sharp maté is not only a nauseous but a positively deleterious beverage He records that the taste of it everlastingly remained, the appetite was lost, there was a strong inclination to vomit, a sense of drowsiness and languor was

[1] Retro-peritoneal Hernia (Baillière, Tindall, and Cox).

experienced with impaired capacity for physical exertion, and, worst feature of all, a distaste for tobacco accompanied these distressing symptoms

Such is the gruesome tale of Dr Sharp s brief experience with the herb In trying to discover the cause of these untoward results several considerations present themselves Was the maté employed itself sound, unadulterated, and fresh ? Is it possible that Dr Sharp by some coincidence was the subject of a bilious attack at the time of his experimentation ? Lastly, might not the cream and the sugar which were added to the maté have been at fault or in excess? and, however this might be, is it wise to take any infusion "hot with cream and sugar ' immediately before or immediately after dinner ' ? I am no wild enthusiast for maté, but I have the Englishman s love of fair play and I do feel that at Dr Sharp s hands the herb has not had fair play It has never had a chance. Taken as it was by him it would have upset the stomach of the stoutest native of the Pampas In fact, from what I know of the natives nothing would have induced any one of them to try it so unless as an emetic

The gaucho invariably takes his maté without the addition of anything but hot water It is 'maté amargo — bitter mate—*aut nullus* with him I have seen it made many hundreds of times but never on a single occasion with cream or with cream and sugar Moreover, in its preparation the maté pot or gourd is no more "filled with maté as Dr Sharp states than the British tea pot is "filled with tea when tea is made Right proportions must be observed with each Nor should the maté be infused for five minutes before being taken It is ready for drinking within a minute although prolonged infusion does not extract much tannin as with tea The exact way in which maté is prepared by the native is as follows The bombilla (*bomba*, a pump, *illa*, diminutive), the tube through which it is sucked, is first placed in the gourd or maté-pot, then the verba is put in—about a tablespoonful is enough rather more being required than if tea were being made The gourd is then completely filled with water which has just ceased boiling—water actually boiling is said to scald the maté. The bombilla is moved as little as possible The first sip through it usually brings into the mouth fragments of yerba, these are not swallowed (the first mouthful has generally to be expectorated which would rather militate against its introduction into our drawing-rooms) Directly it draws well the maté is handed round, to the chief visitor first who is only expected to take a few sips before passing it on to his neighbour To wipe the mouth piece of the bombilla after receiving it or before handing it on is considered very bad manners indeed, although the inclination to do so is to a novice very strong When the maté pot is empty the person in charge of the brew fills it again with hot water or makes a fresh brew, according to the number drinking it It acquires a "flat taste and no longer froths or gives out its fragrant aroma after being extracted with water two or three times

That maté has great and deserved popularity in some parts of South America is of course undisputed The gaucho considers meat, maté water, and salt the necessaries of life With tobacco in addition all his creature comforts are supplied Maté serves him in place of vegetables, but it is also a favourite drink where vegetables and fruit are abundant and where little meat is eaten Every resident in the "campo ' and every traveller will testify to the refreshing, invigorating, yet sedative effects of maté The baneful effects described by Dr Sharp are quite new to me Charles Darwin often mentions maté incidentally in his voyages and never disparagingly It does not seem to have disagreed with him. Here is one passage from the "Naturalist s Voyage' I reached the place of our bivouac by sunset and drinking much maté and smoking several cigarritos soon made up my bed for the night The wind was very strong and cold, but I never slept more comfortably At the end of a long day in the saddle to sit round the camp fire smoking and sipping maté is certainly by no means one of the least enjoyments in life The length of time the gauchos are able to work on maté alone is well known, but I am not sure that their carnivorous habits do not materially assist them to do this Men will rise at 3 or 4 A M, take maté saddle up and be on horseback till after sunset, tiring several horses galloping shouting lassoing, vying with each other all day long in feats of horsemanship going through a day of 16 or 17 hours' hard physical work with ease and comfort with no other refreshment throughout than maté till the evening meal which consists of beef or mutton roasted over the fire ! Could the British workman do as much on his beer ?

Maté is most refreshing when taken after physical fatigue. It should not be taken with food The gauchos wash down their meat diet with water Maté they take by itself or after meals, sometimes before eating, while the "asado" is roasting on the spit. So far from its being antagonistic to tobacco it is exactly the opposite This fact needs no emphasis from me The only way to take it, in my opinion, is through the bombilla A little is thus sipped at a time instead of being "gulped down" in bulk as Dr Sharp took his The mere fact of sipping is sedative and is analogous to smoking. Maté made and served in cups and saucers as tea and coffee are generally in this country and taken at mealtimes is a mistake Taken so it is decidedly inferior to either and can never compete with them successfully In the towns of South America it does not replace tea and coffee and is but little used Personally I do not think that it will ever become very popular in this country The taste for it has to be acquired, it has so essentially a flavour of its own All my attempts to popularise it in my own household have met with the most signal failure, where, to be perfectly frank, it is generally alluded to as "that horrid maté," and I am considered to take it only from sentimental motives That anyone can possibly *like* it is not credited for a moment

The truth of the matter appears to me to be that we have little need for it here in England On the vast prairies of South America staying power in man and horse is a great desideratum, the distances to be traversed are often great, and food for man can be procured often only at long intervals Hence maté which can be easily made wherever there is water and which has certainly great sustaining power, is an invaluable commodity Even to a "gringo" or foreigner the relish for it there comes soon, for it is often "Hobson's choice" and it may easily fall out that maté and cigarettes are the only two courses on the bill of fare Here in crowded England where different conditions obtain and the stomach is rarely empty for more than 30 minutes at a time maté seems to me nearly as out of place as the lasso or the bolas Tea and coffee meet all the requirements of the case The neurotic, the dyspeptic, *et hoc genus omne*, will seek benefit from maté in my opinion, in vain Here I am quite at one with Dr Sharp It is no beverage for such The British workman is too wedded to his beer and his groove is too narrow and set for him to dream of any change to a non alcoholic drink. Not easily are national habits eradicated and replaced by others But there are times even in this country *sub altero Jove* when to a maté-drinker, were it obtainable, maté would be welcome—after exercise in the open air, weary say with pulling against the stream, or with cycling over indifferent roads, but to the novice even then I think it would appeal in vain unless, as I have hinted, it were "Hobson's choice" A cup of tea or a whisky and seltzer would always be most formidable rivals

I am Sirs, yours faithfully

J H DAUBER, M B Oxon

Charles-street, W., 1899

"A CRITICISM OF THE MORE COMMONLY EMPLOYED TESTS FOR ALBUMIN IN URINE"

To the Editors of THE LANCET

SIRS,—With regard to Dr Colquhoun's letter in THE LANCET of May 13th, 1899 may I be allowed to state that my reasons for not inserting the details of the processes by which my results were attained were twofold—first, that my article was intended for the general reader rather than the chemist and was already somewhat lengthy, secondly, that my conclusions were only the incidental product of an investigation into the subject of albuminuria, the details of which I hope to be able to publish later ?

In the interval since the appearance of Dr Colquhoun's article on Carbolic Acid as a Test for Albumin in THE LANCET of May 6th, 1899, I have made use of the test, by the side of the reagents which I usually employ, in some 20 specimens of urine and with several artificial dilutions of blood serum While acknowledging that in Dr Colquhoun's hands it may give the satisfactory results which he claims for it it does not seem to me to have any advantages over salicyl sulphonic acid, Millard s reagent, and several other well known tests

Owing to the large amount of carbolic acid held in solution by the absolute alcohol and the ease with which the alcohol evaporates crystals of carbolic readily separate out and render the fluid not only difficult of transport but also awkward to work with It is certainly a delicate test for albumin, but not so delicate as salicyl sulphonic acid, Millard's reagent or Tanret's solution Great delicacy is not, however, an advantage in clinical work and, as I have pointed out, is a serious objection to salicyl sulphonic acid as a routine test The precipitate produced by carbolic acid and alcohol in albuminous urine is not easily seen, especially where it is faint, owing to the tendency of the urine and the reagent to mix Further, the milkiness produced by the emulsification of the phenol by the water of the urine is a serious drawback. Nucleo-proteids give a well marked reaction and this, unless Dr Colquhoun has excluded it, may perhaps account for the albumin in small quantities which he has found in such a large proportion of his patients Although filtration will remove the obvious "mucous" cloud it does not remove the nucleo proteids

While allowing that Dr Colquhoun's method of estimating the relative delicacy of his test has the claim of simplicity I think that in using egg albumen and from it drawing inferences as to the reaction of the albumin found in urine he is making an assumption for which at present there is no justification In fact, as Dr Colquhoun himself mentions, *in coagulating temperature and its reaction with other egg* albumen differs from the albumin of serum, and in view of these facts we cannot assume that their reactions with other reagents are the same It therefore seems to me that in spite of the greater difficulty and complexity of the method with care a more truly accurate estimation can be made by examining albuminous urines and then separating out and weighing the albumin Urine is such a highly complex and variable fluid that inferences drawn by comparison from artificial solutions are, I think, to be avoided as far as possible until we know much more than at present of the nature and properties of its constituents

I am, Sirs, yours faithfully,

P J CAMMIDGE

St. Bartholomew's Hospital E.C, May 15th 1899.

To the Editors of THE LANCET

SIRS,—I beg to make a correction in my paper and also to add an amendment The word "saturated" escaped my scrutiny A a matter of fact the solution which I have used for the last six months consisted of about five parts of saturated solution of carbolic acid in absolute alcohol to three parts of absolute alcohol The test as I described it is a slow one and perhaps confusing to those who have not experimented on solutions of albumin An immediate result is obtained by warming the fluid to be tested to about 70° C and then pouring the carbolic solution to the amount of about one cubic centimetre on the surface from a pipette so that it penetrates the albuminous fluid to some depth before rising The warming may be continued so as to avoid all milkiness from separation of carbolic acid A pearly milkiness due to albumin at once appears and is quite diagnostic The test is quite as delicate as I described it and is worth mastering

I am, Sirs, yours faithfully,

May 15th 1899. WALTER COLQUHOUN

"THE CENTENARY OF THE CHARTER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND"

To the Editors of THE LANCET

SIRS,—It is sincerely to be hoped that your appeal to the Council of the College to make some recognition of the Members a part of the centenary celebration will meet with a response As you say, nothing could be more fitting than such a step at the present time and it cannot be "beyond the wit of man" to devise a plan by means of which the Members may be accorded a share of representation without interfering with the just rights of the Fellows The scheme of the Members put forward two or three years ago was rejected by the Fellows and Council, let the latter now try their hand and their proposals will be received with respect by all There is nothing whatever irreconcilable in the attitude of those Members who have taken up this question They consider that their claim is a just one in view of the constitution of the College, but they are quite willing to accept any reasonable proposals and to leave the settlement of details to the Council

I am, Sirs, yours faithfully,

May 16th 1899. W G DICKINSON.

THE FEES OF MEDICAL WITNESSES

To the Editors of THE LANCET

SIRS,—It is satisfactory to find from the leading article in THE LANCET of May 6th that attention is at last being called to the inadequate fees paid to medical witnesses in criminal courts The members of no other learned profession would consent to leave their work and possibly travel many miles for the sum of a guinea a day, second class return railway fare, and 2*s* 6*d* a night I have occasionally to go to an assize town 50 miles away and have been detained there for a week or more The fees earned have not paid my expenses My patients have been left in charge of a locum tenent to whom I have to pay three guineas a week Irrespectively of operation cases, the total loss on the week's work has been about six guineas Since this arrangement affects so slight a proportion of the people of this country it is doubtless deemed a small thing by the Government, but it is a very real hardship and heavy burden on a class of men whose services in the detection of crime are of value to the State It is deeply to be deplored that the Home Secretary does not see his way to help us, more particularly as the amount of increase in the fees would be so small a sum in the aggregate Surely two guineas a day is the very least that ought to be offered for the exclusive service of an expert who often makes more than twice that amount at home I sincerely trust that you will kindly continue to help us in the matter I am, Sirs, yours faithfully

May 17th, 1899 PSEUDONYM

MANCHESTER

(FROM OUR OWN CORRESPONDENT)

The Never ending Sewage Difficulty

THE adjourned Local Government Board inquiry into the bacterial sewage purification scheme of the Manchester Corporation was closed on May 1st, and the next day the Commissioners, Major General Crozier and Dr Theodore Thomson paid a visit of inspection to the works at Davyhulme and the corporation land at Carrington and Flixton The application of the corporation was for sanction to borrow £160,000 to cover the estimated cost of the scheme This inquiry occupied two days in January, when the evidence of experts with regard to the bacterial scheme was given, and it was then adjourned to enable details to be prepared and further experiments made at the Davyhulme works Though the scheme is of immense consequence to Manchester, the interest it excites is not merely local, but widespread, and it is said that authorities throughout the country are watching its progress in the hope of benefiting by her costly experience Dr Percy Frankland and Mr W H Perkin, jun, Professor of Organic Chemistry at Owens College, both said that the experiments continued to be highly satisfactory and that there could be no question that the scheme was capable of producing a satisfactory effluent Mr Gilbert J Fowler, the resident chemist at the works, gave elaborate detailed evidence as to the weekly results of the experiments with the bacteria beds He said that the effluent at its worst improved the quality of the water of the Ship Canal At present, however, that might easily happen Dr Thomson said that Mr Fowler was to be congratulated on the amount of labour involved in the preparation of his evidence—"the work contained in the documents and tables upon which it was based was really monumental" The report will be anxiously awaited The summons against the corporation for penalties for fouling the Irwell and Mersey was again adjourned by Mr Yates at the Strangeways County Court from May 4th to 30th At the last meeting of the City Council Sir Bosdin Leech, chairman of the Rivers Committee, spoke of the difficulties arising from the pouring into the drains of noxious fluids from various manufactories "at irregular intervals in large quantities sometimes acid, sometimes alkaline and often charged with chemical or other matter that came down without warning and necessitated an immediate change of

treatment." Some of the manufacturers in the out-town ships, now included in the city, were before incorporation under the jurisdiction of the Mersey and Irwell Joint Committee, which obliged them to purify their trade effluents But now that the city drainage-scheme has extended into the out-townships these ingenuous occupiers of those works "had applied to turn their effluent into the city sewers for convenience and in order to avoid the jurisdiction of the Joint Committee" Regulations have been made to meet this difficulty, but these trade effluents will need constant watching Between the Local Government Board on the one hand, the Mersey and Irwell Joint Committee on the other, and the difficulties somewhat improperly caused by the producers of various trade effluents, the Rivers Committee, or the corporation, recall to mind that patient animal which though strong was crouching between two burdens, only in this case the burdens are more than two, and Sir Bosdin Leech somewhat pathetically told the Council that the Rivers Committee were not on a bed of roses—"a bacteria bed"—some heartless councillor interjected They had to serve he said, not two but four masters first their own citizens who had rejected the culvert scheme, then they had the Local Government Board holding the purse strings and insisting on the 30 years' old land treatment, then a section of the Council still clinging to the culvert scheme and harassing the Rivers Committee on every possible occasion, and, lastly "the Joint Rivers Board, who, seeing the committee bound hand and foot, insisted on flogging the willing horse who would go if he could Looming in the distance was the Royal Commission, whose decision might revolutionise everything and introduce new principles for dealing with sewage Like Job, too, the Committee were troubled with hosts of kind friends who thought they could easily settle the sewage question" Probably the tangle in Manchester is greater than in most places but till this transition period is passed similar difficulties will often be encountered.

May 15th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS.)

Edinburgh Town Council

AT a meeting of the Edinburgh Town Council held on May 9th it was decided that Bailie Pollard should be sent as a representative of the council to the Congress to be held in Berlin in May on the subject of Tuberculosis A letter was read from Bailie Pollard (who was absent) intimating that he intended to go at his own expense The Lord Provost expressed the indebtedness of the town council to Bailie Pollard for the great amount of time and trouble which he had taken in connexion with public health matters and more especially with the question of tuberculosis

The Sanitary Condition of Edinburgh

The Edinburgh Town Council has just received from Dr Williamson, the chief sanitary and market inspector of the city of Edinburgh, an exhaustive report of the work done in his department since May last, at which time the department was constituted At that time 13 assistant sanitary inspectors had been appointed, nine of whom were employed in making door to-door inspections in quest of insanitary conditions while the remaining four had been devoting their time to inspection of dairies, bakehouses and lodging houses, and to the carrying out of the provisions of the Factory and Workshop Shop Hours Acts, and Food and Drugs Acts 10 of the present staff hold certificates in sanitary science and most of the others were preparing to obtain these. The greater part of the work of the department had consisted in inquiry into complaints regarding nuisances of a general nature During the year 686 cases of overcrowding had been discovered. The worst cases of this occurred, as was to be expected in the St. Giles and Canongate districts The reason of the overcrowding was partly to be found in the fact that there was not a sufficient supply of small houses with low rents but it was also due to the character of many of the inhabitants of the slums in whose case nothing but compulsion and the dread of heavy penalties would be efficacious in preventing the nuisance The number of common lodging-houses in the city was 33, with accommodation for 2829 lodgers There were 1239 workshops and 245 bakehouses, of which latter 162 were underground In 278 cases notices had been served for the cleansing of workshops Laundries were rapidly on the increase, being now 58 in number Observations were being made as to the temperature and other conditions under which the work in these places was being carried on and attempts were being made to diminish the warmth and dampness of the atmosphere in them Under the Food and Drugs Act, of 77 samples which were procured nearly 50 per cent. were of doubtful quality or adulterated As regarded the Margarine Act, it had been found that great laxity existed in carrying out its provisions The number of ice-cream shops seemed to be somewhat on the increase These had been closely supervised. The chief objections urged against these shops were of a moral nature and the inspector had become impressed with the desirability of closing them earlier in the evening and if possible on Sundays There were 468 dairies at present on the register in the city and in most of these the conditions had been found satisfactory Of the 230,000 animals slaughtered during the year 523 carcasses had been condemned and seized in the slaughter-house, the predominant disease being tuberculosis Over 6000 visits had been paid to butchers' and other shops during the year Attention had been also directed to the filthy condition of the boxes in which fish were conveyed to the city. The weekly fat stock sales had been regularly supervised and 11 live animals affected with tuberculosis had been seized Every byre in the city was inspected once a fortnight The inspector had recently thought it necessary to draw the attention of the council to the dangers which might result from the use of milk from recently calved cows and special attention was at that time directed to the difficulty of supervising the milk supply from such animals during their stay in the cattle market From inquiry in other districts he had found that the matter had not hitherto received the attention which it deserved

Death of John Moir, M D, F R C P, F.R S Edin

At Edinburgh on the morning of May 15th Dr John Moir died at the advanced age of 91 years Dr Moir's father, a naval surgeon, was taken prisoner in the Napoleonic wars and was imprisoned in Verdun, where his wife joined him and where the son was born After the release of the parents the father settled in practice in Edinburgh, where his son John began the study of medicine. Dr John Moir graduated in 1828 as Doctor of Medicine and became assistant to Professor Hamilton who was Sir James Simpson's predecessor in the Chair of Midwifery in Edinburgh University After Professor Hamilton's death and before the appointment of Sir James Simpson Dr Moir conducted the class His practice in the city was a large and high-class one and until a few months before his death he still retained some of his patients Dr Moir was the father of the Royal College of Physicians of Edinburgh and had occupied the positions of President of the Obstetrical Society and of the Medico-Chirurgical Society He was the only surviving original member of the Medical Missionary Society Dr Moir was twice married and is survived by a widow, two sons, and two daughters

Death of James Rae, M.D Aberd, of Stirling

The death took place at Stirling, on May 15th, of Dr James Rae, retired surgeon, who was a survivor of one of the Arctic expeditions in search of Sir John Franklin He saw most of his service in the navy and at one time held the post of Deputy-Inspector General of Hospitals and Fleets Since his retirement from practice his time has been largely spent in microscopical investigations

Professor Cossar Ewart's Experiments

At the monthly meeting of the directors of the Highland and Agricultural Society held in Edinburgh on May 3rd the committee appointed to consider Professor Ewart's experiments in horse breeding reported that they had visited Penicuik and that they recognised the great scientific interest and practical value of the work carried on The committee suggested that the experiments should be continued with powers to propose to other bodies that they should join with the Highland Society in contributing to their continuance for some years The report was adopted and it was remitted to a sub-committee to arrange for an exhibition by Professor Cossar Ewart of his hybrid horses at the show of the society which was to be held in Edinburgh in July

Aberdeen Hospital Saturday

The committee in charge of this movement have arranged

for a demonstration to take place in Dublin Park on June 24th A detachment of the New South Wales Lancers who lately arrived at Aldershot from Australia will take part in the sports and the proceeds from the gala are expected to be increased thereby

Aberdeen Parish Council and the Vaccination Question

No allowance for the "conscientious objector" is made in the Vaccination Acts for Scotland and the Scotch Local Government Board have again intimated to the city parish council, who have assumed a defiant attitude, that unless a distinct assurance is now forthcoming that defaulters will immediately be prosecuted the Board will proceed against the parish council as previously instructed The parish council, however, have—but by a majority of one vote only—resolved to adhere to their former resolution, which was recently referred to in the columns of THE LANCET

The Health of Aberdeen

The measles epidemic in Aberdeen seems now to be nearly over, the number of fresh cases reported for each of the past two weeks having been only 26 The epidemic has been perhaps the most widespread which has occurred in the health history of the city During January of this year there were 1647 cases with 25 deaths, in February 2177 cases and 34 deaths, in March 1996 cases and 45 deaths, and in April 497 cases and 20 deaths, being 7 8 of the total mortality for the month Last week 11 fresh cases of diphtheria and 11 of typhoid fever were reported, being an increase on the preceding week, and there have lately been two sporadic cases of small pox, one in Aberdeen itself and another a little beyond the city boundary

May 16th.

IRELAND

(FROM OUR OWN CORRESPONDENTS.)

Health of Dublin

OWING doubtless to the prevailing easterly winds the number of cases of lung disease is at present greater than usual At the last meeting of the Managing Committee of Cork street Hospital held on May 11th the registrar reported that the number of cases of pneumonia admitted during the last month was much above the average, though few of them had proved fatal The number of cases of diphtheria had also increased

The Richmond District Lunatic Asylum

The last meeting of the governors of the Richmond Asylum took place on May 11th when votes of thanks were passed to the medical superintendent, Mr Conolly Norman, and to the other members of the medical staff

Legacies to Dublin Hospitals

The late Mr James Weir recently left by his will large legacies to various hospitals and charitable institutions in Dublin and its vicinity The total sum—£120,000—is to be divided among certain institutions fixed upon by the Vice-Chancellor as being included within the terms of the will, the proportion to be allotted to each being left to the absolute discretion of the three trustees under the will

Belfast Asylum

On the occasion of the last meeting of the board of governors of the Belfast Asylum (May 8th) under the old *régime* (in future the management will vest in a committee of the city council) the medical superintendent, Dr Graham, read a very interesting report Referring to the old board he said that they deserve every praise for the recognition of the fact that the aim of alienists to-day in the treatment of the insane is to get them away from all excitement and noise and to place them in buildings in suburban districts, surrounded with pleasant foliage and green fields Such an opportunity has been given by the foresight of the governors in the purchase of the magnificent demesne of Purdysburn for the insane of Belfast. Under such conditions as exist there improvement must be more rapid and permanent, especially in the morose and melancholic cases Patients who in the narrow confines of the old asylum had to be watched will at Purdysburn enjoy a more healthful freedom In the recognition of such facts the late board of governors has shown how progressive its members were It is, as Dr Graham points out, the duty of the new board to provide accommodation for those mentally ill They have the opportunity of building an asylum which shall be a modern hospital for the treatment of brain diseases The patients must be given every chance of recovery—that is, they must be placed where excitement is avoided, freedom of movement allowed, occupation available, and hygienic laws observed in their fullest extent In a word, an asylum is a hospital for diseases of the brain and Dr Graham sketches how such an institution should be constructed The old asylum is quite out of date No mental cases should be placed in workhouses as formerly was done in Ireland. Further, a colony must be established for that most unfortunate class of patients—epileptics To confine such people, who except when the fit is on are often refined, honest, and willing to do what work is possible, is a relic of the past inhuman treatment of the mentally afflicted Dr Graham refers to the existence of such colonies in the United States and at Chalfont St Peter in England Finally, Dr Graham speaks of the importance of the after care of discharged patients who are often homeless and helpless They need the care of friends and the oversight of a physician and he recommends the formation of an unobtrusive association of ladies to look after the needs of such cases Dr Graham's report, from which I have culled a few points, is of great interest Free from the usual statistics of such often bald reports, it is suggestive, eloquently written, and has been received most favourably by the public It is to be hoped that every one of the new board of governors will carefully study its contents

The Belfast Corporation Bill

A curious hitch has arisen in connexion with the new Bill which the corporation is at present promoting in reference to Clause 46, which seeks powers by which the corporation may compel owners of small houses to establish proper sanitary facilities in their properties which have no back passages It refers specially to the 20,000 houses in Belfast which were allowed to be built without back passages The clause as drawn would allow the corporation, if it thought fit, to lend the owners of such property part of the money required to establish proper sanitary conveniences Lord Morley, it appears, has so amended the clause as to make it apply only to houses erected after the passing of the Act and, further, has so altered it as to make it compulsory on the corporation to advance on loan two thirds of the cost of the alterations ordered These alterations would make the clause of no effect, as it must be, to be of any good, retrospective The Parliamentary agents of the city corporation have advised that the clause should, under the circumstances, be dropped, but at a meeting of the corporation held on May 3rd it was decided to refuse to take this advice or to yield to Lord Morley's amendment

Belfast Board of Guardians

At a meeting of the Board of Guardians of Belfast held on May 9th the assistant clerk made an announcement which has astonished the unfortunate ratepayers It would appear that in estimating the expenditure for the year ending March 31st, 1900, they started with a deficit of £9000 This is astounding, considering that a supplemental rate (which, indeed, the unfortunate taxpayers could never very clearly understand) of 5*d* in the £ was made in order to give the new board a clean sheet on April 1st Out of the £9000 there were £1100 to be deducted as the balance of sanitary accounts which were not adjusted by the Local Government Board, £2483 from Parliamentary grants, £600 from workhouse buildings for which a loan was in progress of negotiation, £100 which the Veterinary Department owed them in respect of salaries, and £87 in respect of the hospital, the total being £4400. That left £4600, but a great deal of it could be explained by the regrettable epidemic of typhoid fever With reference to the lunatics the assistant clerk said that the corporation had not seen their way to take the preliminary steps to save the ratepayers £2000 a year If they had taken over the lunatic department of the house they would be entitled to a capital grant of 2*s* a week That stood as a positive loss to the ratepayers of £2000 The Finance Committee of the City Corporation of Belfast have been considering this urgent matter It means that the total requirements of the Belfast Poor law Union for the year ending March 31st, 1900, will be £93,721 6*s* 3*d* This has to be raised by the three county

councils involved owing to the situation of Belfast—Antrim, Down, and the city The share falling on the city of Belfast, according to the calculation, is £87,409 5s 9d, but if we add to this the deficit above mentioned of £4600 there will roughly be a demand on the city rate of £90,000, and this will necessitate a rate of 1s 8d in the £ This is an increase of about 6d This beats the recent increase of the town rates, which was about 14 per cent., while this increase of 6d on the poor rate is a jump of 42 per cent The curious point about the matter is that this is not an increased demand How, then, did the guardians spend even more than this and only levy a 1s 2d rate? This will soon be cleared up as the Finance Committee of the corporation have demanded from the clerk of the union a copy of the guardians estimate for last year under the same heads as given in the present demand in order to compare the two

Glanders in Belfast

Between September, 1898, and the present date, several cases of glanders having occurred, especially among horses owned by cardrivers using the same "hazard," the Veterinary Department of the Privy Council, Dublin, have instructed the authorities to disinfect the stands, and if necessary to close the drinking fountains used by animals, and to take any other required precautions

The Royal University of Ireland

The result of the election by convocation to the Senate of the Royal University was declared on May 9th as follows —Dr Walton Browne, 320, Dr O Sullivan, 204 Dr Browne was thus elected by a majority of 116 At a meeting of the Senate held on May 11th the debate on The O Conor Don's motion, adjourned from the last meeting in October, was resumed, but by leave of the Senators the amendment and motion were both withdrawn It will be remembered that The O'Conor Don proposed a resolution to the effect that university education in Ireland was in an unsatisfactory condition

The Belfast School of Medicine and the Royal University of Ireland

At the recent medical examinations of the Royal University of Ireland students from Belfast have been most successful At the M.B examination Mr John W Megaw B A, was awarded first class and an exhibition of £40, while Mr Robert Steen gained a second class and an exhibition of £25 Both these gentlemen came from Belfast and they were the only candidates who obtained honours At the Second Examination in Medicine Mr Walter Phillips, B A. of Belfast, was the only candidate in the honours list He obtained an exhibition of £15 and second class honours At the Third Examination Mr O Leary of Cork was awarded first-class honours and an exhibition of £30, while Mr David M'Mordie, B A of Belfast obtained second class and an exhibition of £20 Taking all the medical examinations (the second and third and those for degrees) five candidates were put on the honours list, of these four were from the Belfast School of Medicine and of the five there were two first classes from Belfast, one from Cork, and two second classes from Belfast

May 16th.

PARIS

(FROM OUR OWN CORRESPONDENT)

The International Congress of the Medical Press

THE date of this congress, concerning which I gave some details in my last letter, has been fixed for July 27th, 28th, and 29th, 1900

The Treatment of Tuberculosis of the Testicle

At the meeting of the Society of Surgery held on May 3rd M Tuffier read a paper in which he showed how during the last 15 years the treatment of tubercle of the testis had been modified from a surgical point of view This was chiefly owing to two factors—the slight degree of infection so often noticed in visceral tuberculosis and the very important part played by the internal secretion of the testicle as pointed out by Brown-Sequard In 1885 M Tuffier, following the lead of Guyon and Verneuil, always practised ablation of the testicle as soon as he had diagnosed a localised tuberculosis in this gland for fear of the infection becoming disseminated Observations on a good many cases, however, showed him that castration did not always do away with generalisation of infection, especially in patients of tuberculous predisposition, and also that a number of patients suffering from tuberculosis of the testis and even of the prostate who were not castrated, either because they refused operation or because the surgeon considered it too late to interfere, remained in a stationary condition as far as their tuberculosis was concerned M Tuffier cited the cases of some patients whom he knew to have suffered from definite tuberculous lesions for 15 years but whose general health remained excellent, without any tendency to generalisation of tubercle M Tuffier now hardly ever does a complete castration. In those rare cases where there exists a hypertrophic form of tuberculosis with very large caseous nodules he performs a resection accompanied by scraping, if the epididymis is affected he partially resects that also Partial operations are much to be preferred to complete ablation which does away with the benefit of the internal secretion Such operations are scraping and cauterisation with a thermo-cautery M Tuffier only practises castration in cases where the organ is very large or causes inconvenience from pain or the presence of profuse suppuration He removes not only the testicle but also the unhealthy skin of the scrotum and the whole of the tunica vaginalis, for 10 years ago he demonstrated that hydrocele fluid from a case of tuberculous testis contains virulent tuberculous poison

Legal Measures for Facilitating the Treatment of Morphiomania

At the meeting of the Society of Legal Medicine held on April 17th M Lutaud said that a morphiomaniac was a weak minded person who would promise anything and everything but never kept his promise He therefore was a fit subject to be put under control But such control was illegal It was true that certain *maisons de santé* got over the difficulty by making the patient sign a declaration that he would not go away until he was cured, but such declaration had no legal force whatever and if the patient wished to go he could not be prevented M Lutaud considered that it would be as well to add a clause to the law of 1838 making it legal to place morphiomaniacs under control if they applied for such a measure themselves M Mottet, although thinking this suggestion sound, did not consider it would be possible to carry it out He excepted, however, those suffering from cocaine mania, for they were often dangerous owing to their hallucinations M Segnet thought it would be possible to diminish the number of morphiomaniacs and cocaine maniacs by making it punishable for druggists to supply such with the materials for their vice M Bouchereau retorted that morphiomaniacs had no hesitation in forging the signature of a medical man in order to procure morphia As for the proposal of M Lutaud it went against the law of 1838 which forbade medical men to keep under control lunatics who were not dangerous to other persons

Electricity in the Treatment of Gout

At the meeting of the Academy of Sciences held on May 1st M. Guilloz pointed out that the indications in the treatment of gout (a disease which with M Bouchard, he considered to be an auto-intoxication following upon impaired nutrition and so leading to uratic deposits in the tissues) were to improve the nutrition and activity of the tissues as much as possible so as to aid elimination of waste substances M Guilloz had tried the application of electricity in certain patients suffering from obesity, who without any alteration in diet lost about one kilogramme in a week. The nitrogenous output was not increased, proving that the loss came from the fat and hydro-carbons. showing greater tissue activity M Guilloz has tried this treatment in 75 cases of gout He uses cataphoresis of lithium to the affected joints and also high frequency currents both locally and generally The method has been found to relieve pain, improve the movement in the affected limbs, and influence the general health It has not as yet given any good results in cases of chronic rheumatoid arthritis

Commercial Sterilisation of Drinking water by Means of Ozone

At the meeting of the Academy of Sciences held on April 24th M Marmier and M Abraham drew attention to the fact that their researches on the sterilisation of water on a commercial scale by means of ozone dated back to 1895 The experiments are carried out at the laboratory of technical micro-biology at the Pasteur Institute and at the physical laboratory of the normal high school Through the good offices of the municipality of Lille the

two observers have been enabled to try the process on a large scale and they were also greatly helped by an engineer, Mons M X Gosselin The ozone is discharged into a tower built of masonry where it comes into contact with the water circulating in the tower A previous filtration has eliminated the grosser forms of impurity All pathological microbes are destroyed, the only microbe which resists being the bacillus subtilis This microbe, though harmless to man and other animals, possesses extraordinary powers of resistance, being unaffected by steam under pressure at a temperature of 110°C By this process no foreign element is introduced into the water which can have any prejudicial effect on the health of persons who may afterwards use it On the contrary, owing to the increase in the amount of nitrates and the diminution in the quantity of organic matter, water treated by this method is less liable to future contamination and is consequently less liable to alteration

May 16th

BERLIN

(FROM OUR OWN CORRESPONDENT)

Medical Women

THE German Federal Council has decided to admit women to the State examinations in medicine, dentistry, and pharmacy It was mentioned by me on a former occasion[1] that according to current rumour the question would be settled in connexion with the forthcoming alterations in the State examinations, but the Federal Council without waiting till the new regulations came into force has resolved that women may be admitted at once and under the present regulations Moreover, the Council ordained that when in any German university the rules and by laws did not contemplate the matriculation of females the curriculum classes attended by them as exceptional students (*Gast hörer*) were to be counted to them as if they were fully matriculated students Undoubtedly the above decree is the most important of all the steps hitherto taken in this matter, but there are still some difficulties to be overcome before female medical students can fully profit by their new privilege The curriculum includes a good many lectures, practical courses, &c, to which women have hitherto not been admitted by the respective professors and the Federal Council has no authority to compel the members of the Faculties to admit them There is no possibility of passing the State examination without having worked in the dissecting room, and in Berlin, for instance, the professor of anatomy (Dr Waldeyer) has declined to allow female students to work together with those of the opposite sex He considers that there should be special courses of anatomy for females, and until such courses are instituted female students in Berlin will not be able to produce certificates of a full curriculum This and other obstacles will for the present prevent the overcrowding of the medical faculties by women, but it is certain that the removal of the last barrier is only a question of time

The Practitioners' Association

The annual meeting of the delegates of the Practitioners' Association (*Aerztevereins Bund*) was held this year in Dresden, Dr Aub of Munich, the president of the association, being in the chair The members were welcomed on behalf of the State and the municipal authorities and it was noticeable that the president in replying to the address of the representative of the Prussian Government rather ironically said that the meeting was very much obliged to the Government for its kindly words, but that the delegates of the German practitioners would rather hear of Governmental measures by which the condition of the medical profession might be improved The principal subject of this year's proceedings was the "free-choice system" (*freie Arztwahl*) in sick clubs which has been already described in these columns[2] This system has been introduced in a good many clubs to the chagrin of their medical officers and to the great satisfaction of the younger medical men who had not been fortunate enough to obtain club appointments It has, however, been a great drawback that the system of medical aid in these clubs was variable and depended entirely upon the will of the committee or upon the general meeting of the clubs so that in one year the free-choice system and in another the system of appointed medical officers with fixed salaries might be in force, the consequence being that the medical men engaged in club practice under any of these systems were never sure how matters might turn out next year One group of medical practitioners therefore desired that the free-choice system might be made compulsory by law, whilst others were of opinion that it would be better left to agreement between the medical men and the clubs After a very long and animated discussion the meeting adopted a resolution to the effect that the clubs ought to be compelled by law to admit every practitioner desiring to engage in club practice, that contracts between clubs and medical men ought to be controlled by the medical chamber, that persons with incomes of more than 2000 marks (£100) ought not to be admitted as members of workmen's clubs, and that no unqualified man ought to be allowed to give medical attendance to club members This resolution was passed by a great majority, 107 delegates voting for and 29 delegates against the motion The discussion on unqualified practice which had been placed on the order of the day was postponed till next year's meeting

A New Medical Journal

A new medical weekly—the *Deutsche Aerzte Zeitung*—made its appearance on May 1st The editor, Professor Stadelman, formerly of Dorpat, now of the Urban Hospital, Berlin, said in his inaugural article that the journal was designed to meet the requirements of the medical practitioner and that great attention would be paid to treatment The first number contained articles by Professor Gerhardt on Trousseau and Dumontpallier's Reaction, by Professor Harnack on Poisoning by Arsenic, a Pharmaceutical Review by Professor Kobert, a Clinico therapeutical Review by the Editor, a letter from a New York correspondent, &c The new journal is nicely printed

Administration of Chloroform in the Street

A curious event—the administration of chloroform in a public place—happened lately in Berlin A woman in trying to jump from an electric tramcar running at full speed through the Friedrich strasse fell and her right foot was caught between the platform and a wheel Police and firemen made long but fruitless attempts to extricate the woman who screamed piteously Medical help was then sought at the neighbouring university hospital, from which a surgeon and two assistants were sent The surgeon decided to administer chloroform in order to facilitate the work of rescue and did so in the busy thoroughfare and in the presence of a great crowd The tramcar was raised with lifting jacks and when after more than an hour the woman was released from her terrible position with comparatively slight contusions the surgeon was loudly applauded by the spectators

May 15th.

ROME

(FROM OUR OWN CORRESPONDENT)

Professor Cervello's Treatment of Tuberculosis Pulmonalis

RETURNING to this theme, briefly and imperfectly handled in my last letter, I can now, by way of supplement, give further and fuller details as to its "previous history" and present position Dr Cervello has for many months past been studying the action of the formic aldehyde (in familiar parlance "formalina") on the tuberculous lung He disclaims priority in the use of this agent in such cases In fact, he admits that the formic aldehyde, so far from being a novelty in therapeutics, had been tried by other investigators in search of a cure for tuberculosis Their experiments, however, proved abortive or worse that agent being a powerful irritant, causing even painful reactions in the respiratory apparatus healthy or diseased How to conserve its remedial virtues while minimising, if not absolutely excluding, these deterrent reactions? This was the question Dr Cervello set himself to solve His first step was to blend the formic aldehyde with air—with *un ambiente medicato* (a medicated atmosphere)—in the required proportions For this he contrived a special

[1] THE LANCET March 11th, 1899, p. 731

[2] THE LANCET Feb. 2nd 1895, p. 317 July 13th 1895, p. 127 July 18th, 1896, p. 218.

apparatus which he calls "vaporigeno," the use of which maintains in unvarying proportions the evaporation of the formic aldehyde without the necessity of constant surveillance The "vaporigeno" having turned out a success, his next step was to render the formic aldehyde tolerable if not entirely grateful, to the sufferer This involved pharmacological difficulties neither few nor small, but at last he succeeded in obtaining a new compound of the formic aldehyde to which he gave the name of "gazolo" (or less colloquially "igazolo"), which answered all the conditions desired The vapour evolved by this compound soon becomes quite tolerable by the respiratory organs, its inhalation admitting of talking or reading aloud easily—a result impossible under the formic aldehyde *per se* The first two steps gained Dr Cervello next experimented clinically with his 'igazolo" Naturally he would have preferred to begin with tuberculous cases at as early a stage as possible so as to give his medicament the fairest chance. Instead of this he had to commence operation on the inmates of the Guadagna Hospital for Consumption in all of whom tuberculosis pulmonalis had for some time been running its course Making the most of the circumstances, beginning moreover as previously stated in the dead of winter (Jan 15th), he faced every adverse condition—the *ambiente ospitaliero* (hospital environment), the regulation diet, not always modified to his liking and, indeed, comparatively meagre, the tendance and general assistance *non troppo scrupolosa* (not too conscientious)—and all this notwithstanding, he attained results far beyond his anticipations As stated in my previous communication, of the 26 patients experimented on 10 cured absolutely were presented as such to the Palermitan Accademia delle Scienze Mediche of which Dr Cervello is president, and were pronounced on examination by the experts of that body to be *guariti* Nine were almost cured their deliverance from the disease being only a question of time, two were "improved' sensibly, one was stationary, two had got worse, and two died The last were admitted to hospital in an advanced stage of the disease, with *diffusione miliarica*, grave hæmoptysis, or *localizzazioni intestinali*, which of themselves would have had a fatal issue, although even in their case the "igazolo' treatment did work a notable amelioration in the lung All things considered Dr Cervello, after the first course of his clinical experiments, felt justified by his 40 per cent. of cures to follow up his method confident that under better conditions and at a less advanced stage of the disease a yet higher percentage is probable. Pharmacologically speaking, he finds a microbicidal virtue in the "igazolo' peculiarly well adapted to tuberculosis It not merely destroys the bacillus—an only partial benefit, as even when dead the bacillus (according to Strauss) can exercise a pernicious influence—but it has an exceptionally high oxidising power, and to this its curative action is due The "igazolo," in fact, does in a more energetic fashion what hyper-oxygenated fresh air has from all antiquity been found to do in phthisis pulmonalis But to let Dr Cervello conclude in his own words, as given in his memoir, read before the Palermitan Accademia "In a disease like tuberculosis which we are accustomed to regard as nearly always fatal, and which has resisted the most various forms of clinical attack devised by the most powerful intellects, it seems rash to pronounce the word 'cure,' and I confess that it was not without trepidation that I decided to make my studies *publici juris* However, I have sought to cultivate the scientific calm which is the true preventive of every possible source of error and, what is more, I have tried to keep myself extraneous to that affection (στοργη) which dotes on its own offspring and which in therapeutics so readily leads to illusion So far, I think I have succeeded and I therefore wait with due serenity the criticism of my colleagues" All that Dr Cervello claims, it will be seen is to have "made out a case' for further experiments with igazolo' As stated last week, he has been enabled by the munificence of a local millionaire to prosecute these under conditions much more favourable than those presented by the Guadagna Consumption Hospital, while yet another result may spring from their *prosecution so assisted*—they may attract to Palermo that *clientele* for which its well wishers have long been yearning and so lead to its becoming for invalids in general that 'popular health resort" which, as proved up to the hilt in your columns Nature has qualified it to be

May 1st.

MONTREAL

(FROM A CORRESPONDENT)

A Sad Case

IN medical circles and among the laity, too, a general subject of conversation for the last few days has been a surgical misadventure of the utmost sadness—the removal of a patient's sound eye by mistake for the diseased one. The patient, a young man of 18 years, had received an injury to the left eye some five years ago, which had been treated by the operator, an eye specialist of good reputation and of considerable experience in private and hospital practice. A few days ago the injured eye became troublesome and inflamed, and its removal was recommended Consent was given and the surgeon attended with a medical assistant and nurse at the home and enucleation of an eyeball was effected under anæsthesia The friends were informed that it was satisfactorily accomplished A few minutes later the horrible discovery was made that the sound eye had been removed. So strange an accident is fortunately of extreme rarity but not unique, as a similar case has been reported as having occurred in the United States

The Battle of the Clubs

Club practice had received a good deal of attention from the governors of the College of Physicians and Surgeons, our provincial medical rulers, and it had been proposed to discipline members who undertake contract medical work At the last annual meeting there was such an upheaval and there were so many changes in the officers, the result of active canvassing and tactics worked on local issues, that the matter of club practice has dropped out of sight and will not be brought up again for a long time It is estimated that over one fourth of the medical men of the district are interested in club or society work The great power of the members of the benefit societies has been shown in municipal elections and in the dropping of officers, in one case after 30 years' service, who had expressed views opposed to club methods The usual honorarium to the surgeon is 4s per head per annum, medicine is also furnished.

Interprovincial Registration

Up to the present time a medical graduate of one of the provinces could not practise in any other province without re examination and re-registration The awkwardness of this state of things has been manifest ever since confederation was consummated 32 years ago and efforts have been made from time to time to evolve a scheme whereby one examination would do for the entire dominion but without success. Professor T G Roddick, M D, a Member of the House of Commons, is now working energetically on a plan the main feature of which is the creation of a central board of examiners composed of representatives of the provinces who should hold an examination annually at the capital, Ottawa, and grant diplomas entitling the recipients to practise in any part of the country Dr Roddick has addressed numerous meetings of medical men in different sections of the dominion and has met with much encouragement. The various provinces are strong on their 'rights" and the difficulty of securing combined action is very great Another scheme which has been broached is that of the creation of a Canadian University for the sole purposes of examining and the granting of diplomas and degrees

May 8th.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT)

Neglect at the Women's Hospital, Melbourne

THE confidence of the public in the arrangements of the Women's Hospital, Melbourne, has been a good deal shaken lately A patient suffering from peritonitis was sent to the hospital by one of the honorary medical officers She did not arrive on the day expected but on the next day—a Saturday—at about 11 A M She was allowed to walk from a cab to the ward and her admission was not reported to the resident medical officer till midnight when she was in a dying condition She died at 9 A M on Sunday without being seen by any of the honorary staff An inquiry was held and revealed the following state of affairs The hospital

is divided into two departments—the midwifery, under the control of a resident and assistant resident medical officer, and the infirmary under the charge of a separate resident medical officer The last-mentioned, Dr Docker, was away on leave and the midwifery resident, Dr Crowley, was undertaking his duties as well as his own The sister in charge of the nurses in the infirmary department was also away on leave On the Saturday the patient arrived Dr Crowley went out for the afternoon, leaving Dr Stanley, his assistant resident on the midwifery side, in charge of both departments The patient arrived at the hospital before Dr Crowley went out, but her admission was not reported to him by the nurse in charge of the ward She tried to find him after he had gone out and in some inexplicable manner failed to find Dr Stanley who was in the hospital all day Dr. Crowley returned at 7 P M but was not informed then of the patient's admission He went out again and returned at 11 45 P M and went round the wards and found the patient in a dying condition It is a rule of the hospital that the wards shall be visited at 8 P M by the resident and also that he shall not be absent from the hospital for a longer period than six consecutive hours, but it appears that these rules have not been observed for a long time The nurses contradicted each other in their evidence and appeared to have lost their heads The committee thought fit to place all the blame on Dr Crowley who has resigned. The inquiry, however, showed a great want of system in the arrangements of the hospital for the admission of patients, the attendance of the medical officers, and the responsibilities and control of the nurses, a want of system for which the committee itself is responsible

The Friendly Societies and the Medical Profession in Victoria

The various friendly societies, such as the Grand United Order of Oddfellows, the Manchester Unity Order of Odd fellows, the Sons of Temperance, and the Australian Natives Association, have just been holding their annual conferences in Victoria The reports showed that in all of these bodies the sick pay had exceeded the amounts previously incurred and that the financial position of the friendly societies was not altogether satisfactory The action of the Medical Defence Association in calling a conference on the relations of the medical officers to the societies came in for criticism and the general feeling of the members who spoke was distinctly hostile to the proposals of the Medical Defence Association and especially to the idea of excluding from lodges men earning over £200 per annum. It was said, and always is said, by the lodges that if the present medical officers went on "strike" and refused their services to the lodges plenty could be got to take their places, showing that their grievances could not be very great. It is a curious anomaly that members of friendly societies who are also for the most part members of trades unions should make use of such an argument, but it shows the necessity for all members of the profession to join associations like the Medical Defence Association in Victoria and practically to adopt the tactics of the trades unions and to fight the friendly societies with their own weapons

The New South Wales Board of Health

The report of the Board of Health of New South Wales for 1897 has been laid before Parliament. The report states that with reference to the notification of infectious disease it had been thought best to limit the operation of the Act to diphtheria, typhoid fever, and scarlet fever In designing the machinery for carrying out the provisions of the Act the objects kept in view were the following —

To record medically certified cases alone, to secure prompt notification to local authorities to cause local authorities to record it and then to promptly transmit the information to the central bureau there to distribute all cases to the districts to which they rightly belonged and once a fortnight to show on a diagrammatic map how many cases of each disease had occurred in each police district and in each municipal district within it and the deaths which had been thus caused

In relation to the supervision of dairies a good deal of dis content had arisen among dairymen owing to the Board advising the local authorities to see that the provisions of the Act were more stringently enforced, and the local authorities had not all equally complied with the advice and hence a good deal of the feeling of dissatisfaction During the year seven cases of illness were reported to the Board under the Leprosy Act, 1890 It was found that three were cases of leprosy and the remainder were other diseases Two of the cases of leprosy were admitted to the lazaret, and the third patient, who had recently arrived from Queensland, was allowed to return home All were whites—one of native and two of foreign birth

The Geelong Water supply

Dr Gray, assistant medical officer to the Board of Public Health of Victoria, has furnished a report on the water-supply of Geelong He finds that the river water in the vicinity of the intake of the supply is grossly polluted by discharges from mills and other establishments and bacteriological examination showed the following result "The approximate average number of micro organisms per cubic centimetre, growing in gelatin in 90 hours at 70° F, was in No 1 sample, 12,200, in No 2 sample, 4600, in No 3 sample, 4800, and in No 4 sample, 11,000" He concludes that the water is so contaminated as to be utterly unfit for human consumption

Delay in Erecting an Infectious Disease Hospital, Melbourne

At the time of the Queen's Jubilee funds were subscribed in Melbourne for the erection of an infectious disease hospital A site has been granted by the Government, but nothing further has been done The urgent need of such an institution was well illustrated by a recent case A woman and child were staying at a boarding house in the city and the child was taken ill The medical attendant was not sure whether it was diphtheria The landlady of the boarding-house refused to allow them to remain there The private hospitals are not allowed to take in infectious cases and those applied to refused The public hospitals also were unable to take in the child, and finally a private hospital agreed to take the child in The Board of Health then inquired into the matter with a view of prosecuting the proprietors of the private hospital for breach of the Act Ultimately the case proved not to be diphtheria. The responsibility for the delay in connexion with the Infectious Disease Hospital rests with the committee The secretary states that the amended plans and specifications will be submitted for consideration of the committee in a few weeks

Children's Hospital, Melbourne

The new wing of the Melbourne Hospital for Sick Children was recently opened by His Excellency the Governor The whole of the buildings are fitted up in accordance with the most recent scientific methods and as part of a scheme for an entirely new hospital

Alleged Cruel Treatment of a Patient at the Melbourne Hospital

A patient at the Melbourne Hospital recently accused one of the resident medical officers of improper and cruel treatment He alleged that he had been bitten by a snake but the medical officer suspected malingering and applied the electric battery, when the man confessed he was shamming The committee investigated the complaint very carefully and fully exonerated the medical officer, Dr Douglas Shields and found that he did not subject the patient to unnecessary suffering

Queen Victoria Hospital for Women

The following have been appointed honorary consulting medical officers to the Queen Victoria Hospital for Women, Melbourne Surgeons Sir T N Fitz-Gerald, Mr F D Bird, and Mr G A Syme Physicians Dr D Grant and Dr John Williams Gynæcologists Mr R Adam and Mr M A O'Sullivan Children's specialists Surgical, Mr H Russell, Medical, Dr R R Stawell

April 10th.

Obituary.

HENRY BENDELACK HEWETSON, M R C S ENG

MR BENDELACK HEWETSON died on May 13th in his fiftieth year For some few years past the deceased gentleman had been ailing and several attacks of influenza aggravated his condition In March last he broke down and after staying at the village of Essington, near Hull, was removed a fortnight ago to the latter town where he has just passed away.

Mr Hewetson was born at Beverley and while still a youth went to Leeds, where the family took up their residence near Woodhouse Moor The foundation of his education was laid at the Beverley Grammar School and subsequently he joined

the Leeds Grammar School In 1868 he entered as a student at the Leeds School of Medicine and in 1873 he qualified as a Member of the Royal College of Surgeons of England. He then entered the Royal London Ophthalmic Hospital and became clinical assistant to the late Sir William Bowman Having studied aural surgery at Guy's Hospital he was offered the position of house-surgeon at the Royal London Ophthalmic Hospital, but preferred to return to Leeds, where he commenced practice and acted as assistant to Mr T Pridgin Teale In 1883 he became honorary surgeon to the Leeds Public Dispensary and in the same year was appointed one of the honorary ophthalmic and aural surgeons to the Leeds Infirmary, which position he continued to hold up to the time of his death He also held the position at one time of honorary consulting ophthalmic and aural surgeon to the Reynard Hospital, Willingham, and honorary surgeon to the Leeds Public Dispensary Among his contributions to medical literature are "The Human Eye in Perfection and in Error", "Relation between Sick Headaches and Optical Defects chiefly Astigmatic, their Diagnosis and Treatment by Glasses", and "The Localisation of Headaches" To medical journals he was also a frequent contributor, but his literary labours were not confined strictly to medical subjects, 'The Influence of Joy upon the Workman and his Work" and "The Life and Works of Robert Hewetson, Boy Painter and Poet," being two of the best known lay labours from his pen

Mr Hewetson was a Fellow of the British Laryngological Association president of the Otological Section at the British Medical Association meeting in 1893, and a member of the Ophthalmological Society of the United Kingdom and of the Leeds and West Riding Medico-Chirurgical Society He was also a member of the Society of Otology, Laryngology, and Rhinology of Paris

The deceased surgeon was a man of catholic tastes and broad sympathies In everything relating to art he took a great interest and was himself an artist He was a traveller and collector of objects of *vertu* and gave to the Leeds Philosophical and Literary Society's Museum a small but valuable collection of Egyptian antiquities from Old Alexandria and Cairo In 1885 he was elected President of the Leeds Naturalists' Club and Scientific Association and held that position for three successive years As an ornithologist he did much good work, especially in regard to the study of migration He also assisted in the exploration of the famous "kitchen middens" in the Holderness district of East Yorkshire Mr Hewetson leaves a widow and 11 children, for whom much sympathy will be felt.

GEORGE GEDDIE, M D, L R C S EDIN

On May 6th there passed away one of those country practitioners of whom "Ian Maclaren" has written so feelingly in "A Doctor of the Old School.' George Geddie was for 40 years a practitioner in Garmouth, Morayshire, and was parochial medical officer of Urquhart. As the obituary notice in the *Aberdeen Herald* says, "generous to a degree and unsparingly self sacrificing he unmistakeably possessed all the qualities that constitute the ideal type of character in his particular calling' Besides his medical work he was a Justice of the Peace for the county and was for many years a member of the Speymouth School Board. Some six years ago he was presented with a purse of sovereigns in recognition of his valuable services to "three generations of men, women, and children in a wide and populous district" He leaves a widow, three daughters and two sons, one of whom is following his father's profession in Australia.

DEATHS OF EMINENT FOREIGN MEDICAL MEN —The deaths of the following eminent foreign medical men are announced —Dr Marcellin Duval, formerly Director of the French Naval Medical Service —Dr Ulry, head of the Ophthalmic Clinic, Bordeaux —Dr H. Thomas Clinical Professor of Medicine in the Tours Medical School

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THE annual festival dinner in aid of the funds of the East London Hospital for Children was held on Monday night in the Whitehall Rooms Hôtel Métropole, under the presidency of the Duke of Connaught. The festival donations, including 25 guineas from the Duke of Connaught, amounted to £2255

Medical News.

UNIVERSITY OF EDINBURGH —The following candidates were successful at the recent examinations for degrees in medicine and surgery —

First Professional Examination.—R. T G Aickin G C. Anderson, W W Anderson, F L. Atkinson James Bentley W F Brayne, B.A. E. C Brown E. E. Cassaday E. S Clark, E. L. Colby J H. Connolly W A. Cowan C H. Craig Henry Curwen, Arthur Dangerfield, H. S Davidson, D E. Derry T S Dick-Cleland, F H. Dickson, F C Drew H. N Fletcher *Louis Fourie* E G *Fraenkl*, H. S Gaskell, A. C Geddes Archibald Gillespie, E. G Girdwood, W L. M. Goldie A. M. Gurney, E. I. Hall, C R. F Hartley C H. *Houghton*, J H Jones, J M. Kirkness, W S. Laidlaw Vivian Langmore, A. W B. Loudon, Henry MacCormac, J M. MacRae, James M'Turk, V E. Marshall, S. A. Moore, B.A. A. B Morgan, E. G Morton, Ernest Muir C H. Muller W S. Pillans, Herdman Porter A. F Rabagliati E M. Reece W R. Reid, W J D Robertson, David Sandler D J Scott, F. W S Shepherd, G D Sloan, J. A. Small, A. B. Spence, Amelia Sutcliffe E. J Taylor, J P du Toit, Louis Turlansky Robert Veitch G J Wentzel, F A. Wille, G H. Winch, and W D Wright.

Second Professional Examination.—D M. Aitken, J F Allan C M. Anderson, R. V. C Ash A. A. Ayton R. T. Baillie. A. C Begg, R. A. Bellflor, J H M. Bell, R. J Bradley, Alfred Brown, E. E. Brown, G M. Brown James Brownlee R. W Buchanan, Henry Buist E. P Calder R. A. Cameron, S M. D Campbell, C C Choyce, P T Copeland, G G Cumming, B. M. Cunningham, W H. Dickinson M. S. Dickson, W E. C Dickson, B.Sc. (with distinction) Henry Dodgson, J W Duffus, J M. Dupont, J R. Edward, R. S Ellis, B. G Forman, Catherine Fraser Stephen Garvin, R. A. Glegg R. M. Grant A. L. Gurney A. R. Hallam, A. M. Hamilton, R. A. J Harper E. R. Henderson D C Henry, C W Howe, Andrew Hunter M.A A. E Hunter C E. P Husband, William Hutchison, E. M. Inglis, E. M. G Jayne, G A. *Jolly*, A. C Keay, J P. Kennedy G I. Leceme, William Lee, C H. Lindsay Samuel Lyle, J G M'Bride, L. T M'Lintock, C B. M Conaghy J B. M'Cutcheon, William Macdougall, Elizabeth M Elney P F. M Farlan George M Farland A. F M'Kay John M Kenzie H. J C M'Laren K. D C. Macrae William Mair M.A A. M. Malcolmson G R. Mill (with distinction) William Miller J G Mitchell, D Sc. (with distinction), John Morrison David Munro, J G Munro (with distinction), A. C Murray G S. Murray A. D Nimmo D A. Ogilvie J H. C Orr William Paterson, S. G Peill, C E. Pepper George Periera, H. G Pesel, L. W Pole, E. J Porteous, W G Porter E. T. Potts, W H. Prentice, H. St. J Randell, William Ritchie, H. M. Roberts, G C I. Robertson, J S. E. Robertson M. W Robertson C W Salesby (with distinction) J D Saner M. C. C. Seton, T B. Shaw M. W. Smart M. M. Smith, Kate Southon, B. A. Spence, G C Strathairn, David Sutherland, Paul Telles, G L. Thompson, E. C Thomson J P Thorne, G R. Turner E. J Tyrell, E. A. Walker A. S. Watson, A. G Waugh Philip Weatherbe, Edwin Wells T S B. Williams (with distinction) A. J Williamson F E. Wilson, James Woods, and T. B. Unwin.

Third Professional Examination.—Robert Affleck, T. H W Alexander, C H. Allen, J D Anderson, M. S. Anderson, Hubert Bishop, A. B. Black, O C Bradley L. P Brassey J M. L. Brown, M.A., Adam Brydon, G F Bunst, G B. Butt H. E. Arbuckle, R. A. J Asbury B. H S Aylward, A. J Baird, S A. Ballantyne, M C. Beatty J H. Bell, R. A. Cameron, J P Campbell, Malcolm Campbell, G S. Carmichael. J B. Cassels, V P A. Coghill W P. Cormack, John Craig, T. A. Davies, William Eadie, R. S. Ellis, J S Enslin, Edward Ewart, D C. L. Fitzwilliams, Andrew Fleming, Catherine Fraser Alexander Frew W E. Frost, Yoshinobu Fukuda, J. S Gelkie, J C. Gilchrist, W Girdwood P S. Haldane, G. H Hanna, Frederick Hardie, N B. Harding Herbert Harris, Davis Heron, *Eleanor Hodson* K. W *Hogg* H. J *Holle*, L J Hood, F P C Jagger E. B. Jamieson J G S. Jamieson M.A. Miles Johnston, J C Kennedy F K. Kerr S. M. de Kock, Langworthy Laurie, R. G Leach, A. C Lennie Gerard Lowther R. J M Clelland, C B M'Conaghy J G M Dougall, S L. M'Elderry W E. M Farlane, A. C N M Hattie, J H. M Kee, A. J MacKenzie, D S. MacKnight, H. J Maclaren, H. J M Lean, D M. MacLeod, J M. A. Macmillan, Angus M'Nab G W P Maitland, A. A. Martin, Harry Mason, F C Matthew E. T Melhuish, J B. Milne, Joseph Miskelly James Munro Florizel Myers, H. C Nixon, J C. Parker Norman Patterson, C. B. Paul, John Pender M. C. Pepper J B. Primmer J R. Prytherch, Samuel Rattray O L. Rhys C M. Richardson (with distinction) D J Roberts, G A. P *Ross*, *John Ross*, M.A., B. A *Ross* (with distinction), W C. Ross, A. J Ryle, L. S. Sandeman, T. B. H. Scott, W S. Scott, E. T. Selkirk, J F Selkirk, H. D Shepherd, T S Shepherd, S. R. Sibbald F D Simpson William Sloss, J A. Small, C. B. Snow G B. A Speirs A. D Spence E. R. Sproull, T. G Stewart, C. P Strong, M A. Swan J H. Thornley Alexander Trotter C S. Vartan, William Wallace (with distinction), A. G Watson, N S Wells G D Whyte, F M. Wigg, A. W. Wilson, M. R. Wilson, T J G Wilson, A. M. Wood (with distinction), and Garnett Wright.

UNIVERSITY OF CAMBRIDGE —At the congregation on May 11th the following were admitted to medical degrees —

M.D —F Villy M.A. St. John's College.

M B. and B.C.—S. B. Reid, M.A St. John's College and A. F MacCallan B.A. Christ's College.

B.C. only —H N Clarke, B.A Trinity College and J R. Garrood, B.A., St. John's College.

A new Lectureship in Physical Anatomy is about to be established in the University —Professor Kowalevsky of the Imperial University of St Petersburg was on May 11th admitted to the honorary degree of Doctor of Science

ROYAL COLLEGE OF PHYSICIANS OF IRELAND — At a stated meeting of the College held on May 12th the following gentlemen were admitted on examination —

Licentiates in Medicine and Midwifery —George Cole Baker M B. and J J McGrath, L.R.C S Irel

Licentiates in Medicine.—G H Brand, L.S A. and J C McWalter, L.R.C S Irel

Licentiate in Midwifery —A. H Hardcastle, L.S A.

ROYAL COLLEGE OF SURGEONS IN IRELAND — DENTAL EXAMINATION —The following gentleman having passed the necessary examination has been admitted a Licentiate in Dental Surgery of the College Mr W F Crosse The following gentlemen have passed the primary part of the examination for the Licence in Dental Surgery Mr A L Harrison, Mr D L Rogers, Mr J R Small, Mr M Sterling, and Mr E N Tate

THE LATE MR A H REINHARDT —The death of Mr A H Reinhardt, M R C S Eng , L R C P Lond , L S A , occurred on May 6th, at 135, Hornsey road, N , from cardiac failure occurring in the second week of enteric fever The deceased was 33 years of age and was in active general practice in Holloway up to the time of his illness a fortnight ago He had been in Holloway four years, having previously practised in the neighbourhood of Battersea-park He was educated at the Yorkshire College and the London Hospital Medical School He possessed an exceptionally powerful and muscular physique and was in robust health until the commencement of his illness The body was cremated at Woking on May 9th

CHARING-CROSS HOSPITAL —A bazaar in aid of the building fund of Charing cross Hospital will be held in the Albert Hall on June 21st and 22nd under the patronage of the Queen, the King of the Belgians, the Princess of Wales, Princess Christian, and other royal ladies, several of whom have graciously promised to be present during the pro ceedings The arena of the hall will be covered over with a platform upon which stalls will be arranged to represent different countries A book is being prepared as a souvenir of the bazaar and will be illustrated by artists of the highest repute, amongst whom are the greater number of the Royal Academicians Communications and offers of help for the Swiss stall may be addressed to Mrs Kitto, St Martin's Vicarage, Charing cross, W C

BRISTOL ROYAL INFIRMARY.—The annual distribution of prizes to the students of the Bristol Royal Infirmary took place on May 9th Sir Charles Cave, Bart , occupied the chair and made the presentations, of which the following is a list —Entrance Scholarship, Mr H Gough and Mr P Maxey (£10 10*s* each), Suple Medical Prize and Gold Medal, Mr James Phillips , Suple Surgical Prize and Gold Medal, Mr J R Frost, Clark Prize, Mr P G Stock, Tibbits Memorial Prize, Mr J R Frost and Mr E M Pearse, Pathological Prizes, Mr J R Frost and Mr J Phillips, Ophthalmic Prize, Mr P G Stock, Dental Prize, Mr S Wilcox , Special Dental Prize, Mr J L Tilly , and Special Midwifery Certificates, Mr J R Frost, Mr H Hemsted, Mr W B Prowse, and Mr P G Stock

LITERARY INTELLIGENCE —Mr Henry Kimpton of High Holborn announces the publication of a work entitled ' Progressive Medicine " It will be published in four volumes every year at intervals of three months and will be copiously illustrated In the words of the prospectus it will " present in an original, narrative form a clear statement of the practical advance made in every department of medicine and surgery during the year, each specialty being dealt with by a single authority " The general editor is Dr Hobart Amory Hare and the subscription for the four volumes to be published every year is £2 10*s* —For some years past Mr F J Hanbury, F L S , of the well known firm of Messrs Allen and Hanburys, has been engaged upon a work dealing with the flora of Kent, assisted by the Rev E S Marshall, F L S , vicar of Milford, Surrey The book has just been published and contains besides an account of the flora notes on the topography, geology, and meteorology of the county The price is 12*s* 6*d* net and orders may be sent through any bookseller or direct to Frederick J Hanbury, Plough court, Lombard street, London, E C —Messrs William Green and Sons, of St Giles street, Edinburgh announce the publication of an Encyclopædia Medica in 12 volumes to be issued quarterly The price per volume is 20*s* or if the series is subscribed for now 17*s* 6*d* Orders mu t be sent before June 15th. The general editor is Dr Chalmers Watson A supplementary volume will be issued from time to time so as to keep the book up to date and with each will be given small gummed marginal labels which can be placed opposite the article affected in the original volume For example, one label would run " Abscess, for further information see Supplement, p 130 " The agents in London are Messrs J & A Churchill, Great Marlborough street

THE Trustees of Smith's Charity have sent a donation of £100 to the Royal Hospital for Diseases of the Chest, City road, E C

ROYAL ALBERT HOSPITAL, DEVONPORT —As a result of the bazaar recently held in aid of this hospital the sum of £715 has been forwarded to the institution

MEDICAL MAGISTRATE —Mr R E E South L R C P Lond , M R C S Eng , has been appointed a Justice of the Peace for the Borough of Boston, Lincolnshire

BRISTOL JUBILEE CONVALESCENT HOME —Her Majesty the Queen has given a conditional promise to open the Bristol Jubilee Convalescent Home in November or December This institution has been erected on the Clifton Downs at a cost of £90,000 as a Jubilee-memorial

PRESENTATION TO AN ARMY MEDICAL OFFICER.— At a fête recently held on the premises of the Borah Mosque, India, Major R J Geddes, M B Glasg , of the Royal Army Medical Corps, was presented with an address a gold watch, a silver plate, and a despatch box, in recognition of the valuable services rendered by him to the Borah community in India during the plague epidemic Major Geddes was in charge of the plague hospital and segregation camp for about six months His skill and energy were manifest at the time by the fact that out of 49 patients admitted to the hospital no less than 32 recovered It is a rule in the service that no presentations are to be made to any officer, but from the exceptional circumstances of this case the authorities relaxed the rule to allow the natives of the district to show their esteem and appreciation of Major Geddes's services

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS

Scotch Parish Council Medical Officers

MR. ALEXANDER CROSS has introduced into the House of Commons a Bill to give an appeal to the Local Government Board to the medical officers of parish councils in Scotland.

Sale of Food and Drugs Bill

This Bill having now been dealt with by the Grand Committee on Trade goes before the House of Commons for the report stage and Sir Charles Cameron will take this opportunity of bringing forward his proposal for the appointment by the Local Government Board of a Standing Committee of Reference on Food Standards.

HOUSE OF LORDS

TUESDAY MAY 16TH.

Isolation Hospitals.

The Earl of LICHFIELD at this sitting of the House moved the second reading of the Bill introduced by him to amend the Isolation Hospitals Act of 1893 His lordship explained that it had been assumed that where efficient hospitals were in existence built under the Public Health Act of 1875 with the assent of the local authority and the Local Government Board they might be transferred to the new local bodies and that the county councils might contribute to the expenses if they so pleased Unfortunately the Local Government Board had decided that in neither of these cases was it legal so to act, and thus the operation of the Act of 1893 was seriously crippled There was, indeed, a deadlock existing in many counties. The Bill was introduced with the assent and support of the County Councils Association of England and Wales, who were anxious that a change should be made in the law as speedily as possible The Bill gave power to district councils and joint boards to transfer hospitals to county councils and it allowed county councils to contribute towards the expenses of the hospitals provided under the Act of 1875. Power was also given to the county councils to borrow—a power which they did not possess under the Act of 1893.

Lord HARRIS said that the Local Government Board while fully approving of some of the provisions of the Bill, were not quite satisfied as to the provision enabling county councils to take over existing hospitals.

The Bill was read a second time

London Water Question

In the course of the consideration in committee of the whole House of the Metropolitan Water Companies Bill a clause was inserted providing that "Nothing in this Act shall authorise the construction by any

metropolitan water company of any works for the purpose of utilising any supplies of water drawn from wells outside the water limits of the metropolitan water companies not now utilised under the powers possessed by such companies"

HOUSE OF COMMONS

THURSDAY, MAY 11TH.

Vaccination Certificates

Mr BROADHURST asked the President of the Local Government Board whether in view of his statement that non-delivery of a certificate of exemption under Section 2 of the Vaccination Act 1893 to the vaccination officer within seven days after it had been granted rendered the certificate null and void, he could now state to whom such certificate should be delivered during any period in which, through death resignation or non appointment, there was no vaccination officer for the union and whether as in case of the death or removal of the vaccination officer or of errors in or the destruction of his registers, there might be a difficulty in proving the registration of certificates in subsequent proceedings, he could arrange for the issue of a certificate of the delivery and registration which might be available as evidence of the granting of a certificate of exemption and its delivery and registration within the prescribed period.—Mr CHAPLIN: In the event of a vacancy in the office of vaccination officer which cannot be filled up forthwith the guardians are required to appoint a person to act temporarily and it would seem that the certificates of conscientious objection should be delivered to the person so appointed I am not aware that any difficulty of the kind referred to in the second paragraph of the question has arisen. It does not appear to me to be necessary at all events at present, to make any arrangements in regard to it

FRIDAY, MAY 12TH.

Statistics of Insanity

Mr WILLIAM CORBET asked the Home Secretary whether his attention had been recently called to the statistics of insanity whether he was aware that an increase in the actual numbers of registered insane from 95,625 to 132,831 had taken place between the years 1882 and 1896 and an increase in the ratio of insane to population from 1·81 to 3 33 per 1000 during the same period and whether he would cause an inquiry to be made into the subject to ascertain if any means could be devised to arrest the spread of the disease.—Mr JESSE COLLINGS (for Sir MATTHEW WHITE RIDLEY): I am aware that the numbers of the registered insane do most unfortunately increase. At the same time I would refer the hon Member to the special report of the Lunacy Commissioners published in 1897 on the subject and I cannot say that at present I see sufficient ground for directing further special investigation

The Mistakes of Dispensers.

Major RASCH asked the Vice-President of the Committee of Council whether the Executive of the General Medical Council had stated in their reply to the Privy Council what grounds they had for considering that accidents due to the employment of unqualified dispensers by medical practitioners were very rare, and if not, would he ask that body what means they had of knowing the number of accidents, fatal and otherwise which resulted in doctors surgeries from the employment of unqualified dispensers.—Sir JOHN GORST: The infrequency with which such cases are reported to the Privy Council tends to confirm the opinion of the General Medical Council that they are very rare and the Privy Council have not therefore thought it necessary to ask the General Medical Council for any further information.

Examinations for Meat Inspectors.

Mr FIELD asked the President of the Local Government Board whether he was aware that there existed no body specially empowered to conduct examinations and issue certificates to candidates applying for appointments as meat inspectors and whether he would arrange to establish such authorised body on the lines indicated in the Local Government Board Order of March 11th, 1899.—Mr CHAPLIN: I have no statutory authority to carry out such an arrangement as that referred to in the question and before proposing any legislation on the subject it seems to me desirable to await the result of the communications which we have addressed to the local authorities. But the Sanitary Institute and other bodies have I believe, for some years past afforded opportunities for training and examination in meat inspection in connexion with the certificates to sanitary inspectors and I have no doubt that the recently constituted Sanitary Inspectors Examination Board will maintain similar examinations. Moreover I understand that the Sanitary Institute are maturing a scheme for holding special examinations in meat inspection.

Mile End Vaccination Case.

Mr STEADMAN asked the President of the Local Government Board (1) If he would state the statutory authority for imposing a poll tax on all registered births in England and Wales (2) had he received a further communication from Mr J F Haines, of Mile End, calling attention to another case of eruption after vaccination—viz the case of the child of Mr and Mrs. Fitzer of Louisa street, which was vaccinated on the same day as Mr and Mrs. Rouse's baby and by the same public vaccinator and had an inquiry been made (3) did the public vaccinator report either the case of Mr and Mrs. Rouse's baby or of Mr and Mrs Fitzer's (4) was there any penalty and what imposed on the public vaccinator if he neglected reporting such cases to the Local Government Board (5) was he aware that the Mile End Guardians had adjourned the consideration of the Rouse case pending the report of the Local Government Board's inspector and (6) would that report be forwarded to the said board of guardians.—Mr CHAPLIN: As regards the first point I do not know what is the tax to which the hon Member has referred. I have received a communication from Mr Haines as to the child referred to in the second paragraph but my information resulting from inquiries I have made is in direct conflict with his. The child was not vaccinated on the same day as Mrs Rouse's child but more than a month afterwards. The child suffered after its vaccination from a mild attack of chicken pox a disease which has no reference to vaccination. The mother herself expressed annoyance that persons who had called on her had wanted her "to make a fuss that the chicken pox was due to vaccination." In reply to the fourth paragraph there is no obligation on the part of the public vaccinator to report to the Local Government Board such cases as those referred to in the question And in reply to the fifth paragraph I have received a communication from the guardians with regard to the case but they do not ask for a copy of the inspector's report, and it is not customary to forward to the guardians copies of reports of this kind which must often necessarily contain references to private family history

London Water Question.

When the East London Water Bill as amended by the Private Bill Committee came on for consideration by the House Mr JAMES STUART moved to insert a clause to this effect If the undertaking of the company is purchased within seven years from the passing of this Act otherwise than by agreement by any public body or trustees nothing in this Act shall authorise the company to bring into account or to make any claim in respect of any advantages conferred on them by or resulting from the passing of this Act."—Sir JOSEPH PEASE, who was Chairman of the Private Bill Committee, Mr CHAPLIN and others opposed the clause and the House rejected it by 185 votes to 73.

TUESDAY MAY 16TH.

Poisoned Arrows

Mr HEDDERWICK asked the Secretary of State for the Colonies if his attention had been drawn to the frequent use of poisoned arrows by the natives of West Africa and whether any arrangements could or would be made, for the scientific analysis of the poisons so employed and of alleged native or other antidotes, in the Colonial Medical Institution the functions of which he recently described.—Mr CHAMBERLAIN: It is not proposed to make arrangements in the School of Tropical Medicine for the scientific analysis of arrow poisons and their antidotes as such arrangements would entail expense which the school is at present hardly in a position to meet. Only one case of the use of poisoned arrows in West Africa has been brought to my notice and in that case an analysis of the poison and of the supposed antidote was made at Netley

Post mortem Examinations in Scotland.

Sir WILLIAM PRIESTLEY asked the Lord Advocate whether in cases in which post-mortem examinations were made by order of the Procurator Fiscal medical men who had had charge of a patient prior to death were allowed to be present at the examination, or whether the practice throughout Scotland in regard to granting or refusing permission was not uniform whether persons suspected of having caused the death by criminal or other means were granted facilities for being medically represented at the examinations whether intimation was given to interested persons in time to allow their making application for representation to the right quarter, and if he would state what was the right quarter where such application should be made.—The LORD ADVOCATE: No person except the medical men instructed to conduct the necropsy is allowed to be present except with the consent of Crown counsel or on the order of the sheriff Crown counsel may in their discretion sanction the presence of a medical man who has attended the case or in the interests of the accused, but this is done only on condition that he is to be present merely as an onlooker and is not to interfere in any way with the Crown examination. No formal intimation is given that a necropsy is to be held but in all cases where any person is in custody on suspicion of causing death a necropsy is made as a matter of course, so that an accused person or his advisers cannot be in doubt as to the necessity of making immediate application for permission to send a medical man to witness the necropsy if they so desire it. The quarter to which application should be made is the Procurator Fiscal whose duty it is in all cases of urgency to communicate by telegraph with the Crown agent for the instructions of Crown counsel If an independent post-mortem examination is desired it can be made after the Crown examination.

Scarlet Fever at Buxton.

Mr JEFFREYS asked the President of the Local Government Board whether he was aware that on the occasion of an outbreak of scarlet fever at Buxton the milk from certain farms had been prohibited from entering the council district and that the council prohibited the sale of the milk without any evidence of its having produced the disease and whether this prohibition was based on any statutory power.—Mr. CHAPLIN: I have communicated with the Buxton Urban District Council and I am informed that in consequence of an outbreak of scarlet fever the district council prohibited the milk from three farms outside the district from being supplied within the district. The orders appear to have been made under Section 4 of the Infectious Disease (Prevention) Act 1889 on the report of the medical officer of health that on an inspection of the farms and in the company of a veterinary surgeon of the animals thereon he was of opinion that infectious disease was caused by the consumption of the milk supplied from the farms.

THE SALE OF FOOD AND DRUGS BILL.

PROCEEDINGS IN THE GRAND COMMITTEE.

THURSDAY MAY 11TH.

The Grand Committee of the House of Commons on Trade met to-day with Mr JOHN ELLIS in the chair and proceeded with the consideration of the Bill to Amend the Law Relating to the Sale of Food and Drugs The Committee dealt in the first place with Clause 17 which in the Bill as introduced read as follows—viz.: 1. A warranty or invoice shall not be available as a defence to any proceeding under the Sale of Food and Drugs Acts unless the defendant has, within seven days after receipt from the purchaser of notice of his intention to take proceedings sent to the purchaser a written notice stating that he intends to rely on the warranty or invoice and specifying the name and address of the person from whom he received it. 2. A warranty or invoice given by a person resident outside the United Kingdom shall not be available as a defence to any proceeding under the Sale of Food and Drugs Acts, unless the defendant proves that he had taken reasonable steps to ascertain the accuracy of the statement contained in the warranty or invoice"

Mr R G WEBSTER moved to amend the clause by inserting at the beginning the words: For the purpose of Section 25 of the Sale of Food and Drugs Act 1875, an invoice shall be deemed to be a warranty without the addition of express words of guarantee, but." The hon Member explained that according to Section 25 of the Sale of Food and Drugs Act 1875, the defendant was to be discharged if he proved that

he bought the article in the same state as sold and with a warranty His amendment was based on the recommendation of the Select Committee on the Adulteration of Food Products and was, he said, justified by the experience of the Margarine Act which accepted an invoice as a warranty

Mr WALTER LONG said that while no doubt the Select Committee had passed a recommendation of this kind they added a proviso that there should be a limit as to the time during which the warranty should run in the case of goods in bulk and perishable articles and it was for the present Committee to consider whether it was practicable to insert such an amendment and what its effects were likely to be if it were inserted. His hon. friend had told him that by a subsequent amendment he intended to make the wholesale dealer a party to the prosecution, but when he came to that proposal his hon. friend would find practical legal difficulties in the way which he would be unable to overcome. It must be remembered that the fraud which was to be the cause of action was created by the sale on the part of the retailer to some customer of an article which turned out to be fraudulent. The wholesale dealer was not a party to that sale and could not be made a party to it by any process known to the law at present. It was proposed to bring him in because in another sale he had delivered to the retailer an article which afterwards turned out to be adulterated. As he was advised that was a proceeding which it would be impossible to incorporate in the Bill The experience of the Margarine Act had been quoted, but he would ask the Committee to remember that that experience was limited to butter and margarine which involved simple questions as compared with those involved in the many other articles covered by the Sale of Food and Drugs Acts. Another point to consider was that if an invoice was to be regarded as a warranty something would have to be added to it and with that addition made he would like to know what became of the distinction between an invoice and a warranty After a due consideration of all the circumstances he asked the Committee to reject the amendment on the ground that it would weaken the procedure under which it was hoped to discover offenders and successfully prosecute them. He was firmly convinced that any attempt to shift the responsibility from the person who was a party to the transaction to someone who might be behind him would weaken the administration of the Acts.

Mr ASCROFT said that not only did he support the principle of the amendment, but he wished to see it extended

Mr KEARLEY reminded the Committee that there was more fraud in connexion with butter and margarine than any other articles and argued that if an invoice could with safety be accepted as a warranty under the Margarine Act there would be little risk in so accepting it under the Sale of Food and Drugs Acts Without such an amendment as this, they made the retailer responsible for the dishonesty of the wholesale dealer an injustice for which he felt sure that Committee would not stand sponsor

Mr PARKES expressed the view that they must get at the wholesale dealer if they hoped to do any good by this legislation.

Mr HEYWOOD JOHNSTONE said he believed that this proposal would not work. The answer to what had been put forward in its support was why did not the retailer ask for, and insist upon, getting a warranty? If they carried this amendment they would have absolved the retailer altogether, and he objected to that most emphatically

Sir CHARLES CAMERON intimated that he would vote for the amendment though he thought it did not go far enough.

The SOLICITOR-GENERAL (Sir Robert Finlay) said that in some cases an invoice might be a warranty but in most cases it was not. In the former cases the remedy would be by independent proceedings against the person who had given the false warranty He was not going to say anything about the merits of this amendment what he did say was that in its present form it was very objectionable.

After some further discussion the amendment was carried by 20 votes to 16.

On the motion of Mr WALTER LONG the following words were inserted at the end of the first sub-section—viz.: And has also sent a like notice of his intention to such person. The person by whom such warranty or invoice is alleged to have been given shall be entitled to appear at the hearing and to give evidence and the court may, if it thinks fit, adjourn the hearing to enable him to do so

Mr R. G WEBSTER moved to add these words which he regarded as consequential upon the decision come to by the Committee—viz.: 'And unless he shall summon before the court the person upon whose warranty he so relies. If the defendant shall be discharged from the prosecution under Section 25 of the Sale of Food and Drugs Act the prosecutor shall be entitled to proceed forthwith against the person so giving the warranty as aforesaid, and if it be proved that such warranty was false the person so giving the same shall be guilty of an offence under this Act and shall be liable to the penalties mentioned in Section 14 of this Act."

Mr WALTER LONG suggested that the hon. Member might withdraw this amendment now and leave the whole subject to be put into proper form during the report stage. It was possible that the course the Government would take to carry out the decision of the Committee might be different from the words he now proposed but at all events if he withdrew them now the Government would deal with the matter as a whole on the report stage.

The amendment was by leave withdrawn.

An amendment moved by Mr. KEARLEY to exclude foreign warranties was rejected by 25 votes to four

On the motion of Mr BARTLEY the following words were added to the clause viz. 'Where the defendant is a servant of the person who purchased the article under a warranty or invoice he shall, subject to the provisions of this section be entitled to rely on Section 25 of the Sale of Food and Drugs Act, 1875, and Section 7 of the Margarine Act, 1887, in the same way as his employer or master would have been entitled to do if he had been a defendant, provided that the servant further proves that he had no reason to believe that the article was otherwise than that demanded by the prosecutor

Clauses 18 (duty of court to send articles for analysis) and 19 (provisions as to certificates of analysis) and the supplemental clauses having been agreed to the Committee adjourned.

FRIDAY MAY 12TH.

The Committee met again to-day for the consideration of the proposed new clauses.

Sir CHARLES CAMERON moved to insert in the Bill this clause, viz.: "When an employer is charged with an offence under this Act he shall be entitled, upon information duly laid by him, to have any other person whom he charges as the actual offender brought before the court at the time appointed for hearing the charge, and if, after the commission of the offence has been proved, the employer proves to the satisfaction of the court that he has used due diligence to enforce the execution of the Sale of Food and Drugs Acts, 1875 to 1899, as defined by this Act, and that the said other person had committed the offence in question without his knowledge, consent, or connivance, the said other person shall be summarily convicted of such offence and the employer shall be exempt from any penalty" The hon. Member explained that the clause was copied from the Margarine Act and helped to carry out his proposition that in all these matters there should be similar treatment.

Mr WALTER LONG said he hoped the Committee would not adopt the clause, for he believed, in spite of the fact that the Margarine Act contained a similar clause, that it would weaken and in fact break down the administration of the Act. It would be impossible to recover penalties if the master were free in the manner proposed to put the blame upon the employé who might very well be a young lad earning only a few shillings per week. The only safe course in his opinion was to adhere to the old principle which made the master responsible for the acts of his servant. It was true that it had been departed from in the case of the Margarine Act, but he would remind the Committee that the clause was inserted in one of the final stages of the Bill in the House of Lords and for himself he must say that he was sorry the House of Commons did not reject the provision.

Mr BARTLEY supporting the clause, said that justice demanded its insertion in the Bill.

Sir CHARLES CAMERON said that so far as he knew there had been no complaint about the operation of the clause in the Margarine Act and asked the President of the Board of Agriculture to remember that in this case they were making people liable to imprisonment and not merely to civil consequences The principle of the master being responsible for the act of his servant did not apply to criminal liability

Mr R. G WEBSTER contended that it would be absurd to imprison a man when he had shown that he had no intent to defraud and had taken adequate precautions against fraud.

Mr T W RUSSELL said that there was a broad distinction between the Margarine Act and the Sale of Foods and Drugs Acts, for while the former dealt with such matters as packing, branding lettering &c, the latter dealt with the much more serious affair of adulteration Such being the case, he thought it would be extremely dangerous to adopt this clause from the Margarine Act.

Mr JOHN BURNS opposed the clause on the ground that it offered a bad precedent for other legislation in connexion with coal mines and workshops and other matters

Mr HEYWOOD JOHNSTONE said that 70 per cent. of the defences under the Margarine Act were the innocent and simple-minded assistant just up from the country who knew nothing about margarine and he contended that the proposed clause would put a premium upon this class of assistant.

The clause was rejected by 20 votes to nine.

On the motion of Mr BARTLEY the following clause was inserted in the Bill, viz.: '1 For the purposes of the Sale of Food and Drugs Acts the expression 'food' shall include every article used for food or drink by man other than drugs or water, and any article which ordinarily enters into or is used in the composition or preparation of human food and shall also include flavouring matters and condiments. 2. The definition of 'food' contained in Section 2 of the Sale of Food and Drugs Act, 1875, is hereby repealed."

On the motion of Mr KEARLEY this clause was inserted, viz Any person who wilfully obstructs or impedes any inspector or other officer in the course of his duties under the Sale of Food and Drugs Acts, or by any gratuity bribe promise, or other inducement prevents, or attempts to prevent, the due execution by such inspector or officer of his duty under those Acts shall be liable on summary conviction for the first offence to a fine not exceeding £20, for the second offence to a fine not exceeding £50, and for any subsequent offence to a fine not exceeding £100

Mr KEARLEY moved to insert a clause in the following terms, viz: Any inspector appointed by any local authority or by the Local Government Board under this Act shall have power: (a) At all reasonable times to enter any private or public sale room occupied or used by merchants, brokers, wholesale dealers, or other persons, and any public or private warehouse, factory store, quay shed, ship or barge where food or drugs are offered for sale or deposited for the purpose of sale or carriage, and to purchase, seize, or procure samples of any such food or drugs (b) to purchase, seize or procure samples of any food or drugs at the time of delivery or at any railway station or other place during transit or upon the premises of or elsewhere in the possession of any person for the purpose of carriage." He was advised he said that inspectors must have this power conferred upon them if they were to put down a system of fraud which was carried on to a very considerable extent.

Mr WALTER LONG submitted that the clause went too far in the direction of interference and assured the Committee that before introducing the Bill the Government had considered very carefully what powers were necessary for the proper and effective administration of the Act.

After a debate of some length the clause was rejected by 25 votes to six.

Mr HEYWOOD JOHNSTONE moved to insert: 'After the commencement of this Act no milk containing less than three and a half per cent. by weight of butter fat shall be sold, or exposed or offered for sale under the term 'prime milk and any person acting in contravention of this section shall be liable on summary conviction to a fine not exceeding £20"

Mr WALTER LONG while sympathising with the object of those who had framed the clause, said he could not regard it as practicable and therefore he must ask the Committee to reject it.

The clause was rejected by 33 votes to one.

Sir WILLIAM HOULDSWORTH moved to insert: Where a sample of milk has been taken in the district of any local authority for the purpose of analysis by the analyst of such district the local authority shall at the request of the person from whose milk such sample was taken cause other samples to be taken, either within or without such district of milk from the same consignor and shall submit such samples to the same analyst and if it shall appear that such analyses

are in effect the same no proceeding shall be taken or if commenced be further prosecuted against the consignee of the milk, but the local authority may take proceedings against the consignor and may recover penalties for any offence as authorised by Section 3 of the Sale of Food and Drugs (Amendment) Act, 1879.' This clause he said, was designed to protect the innocent dairyman or consignee who obtained his milk from places outside the jurisdiction of his own local authority At present the local authority was not empowered to take milk for analysis outside its own jurisdiction.

Mr WALTER LONG said that he was afraid the clause went further than its authors intended. It not only gave the local authority power to go outside its district in order to take samples, but it practically stayed proceedings if the second analysis produced a result similar to that produced by the first analysis in the district where the milk was sold. On the point of local authorities going outside their own area there was strong feeling at the present time and before any action was taken in that direction the matter would have to be very carefully considered and dealt with on broad and comprehensive lines.

Sir WILLIAM HOULDSWORTH said that if the Government undertook to consider the matter he would withdraw the clause in the meantime.

Mr WALTER LONG said that between now and the report stage he would consider whether it was possible to deal with the power of taking samples but he could not undertake to incorporate an amendment giving relief from proceedings.

On this understanding Sir WILLIAM HOULDSWORTH withdrew his proposal.

Several other proposed new clauses remained on the notice paper but they were not moved, and the Bill was ordered for report to the House of Commons.

BOOKS, ETC., RECEIVED

AMERICAN MEDICAL ASSOCIATION PRESS, Chicago.
War Correspondence (Hispano-American War) Letters from Dr N Senn. Reprint. 1899

BALE, J, AND SONS Great Titchfield-street, London.
Eastbourne as a Health Resort. By C Roberts, F.R.C S 1899. Price 1s.

BINDERNAGEL, CARL, Friedberg and Bad Nauheim.
Bad-Nauheim: its Springs and their Uses. By J Groedel, M.D Second edition. 1899.

CASSELL AND CO. London.
Materia Medica and Therapeutics. By J M. Bruce, M.D Lond. Thirty-eighth thousand. 1899 Price 7s 6d.

CARRÉ, GEORGES, ET C NAUD Paris.
Les Fonctions Rénales. Par H. Frenkel.

CHURCHILL, J & A., Great Marlborough-street, London.
A Class-book (Elementary) of Practical Physiology including Histology, Chemical and Experimental Physiology By De Burgh Bruce M.D C M., F R.S E. 1899. Price 6s. 6d.
A Short Practice of Midwifery embodying the Treatment Adopted in the Rotunda Hospital, Dublin. By H. Jellett, B.A., M.D Dubl. F R.C P Irel. With a Preface by W J Smyly M.D F R.C P Irel. Second edition. Illustrated. 1899 Price 6s

COMPANIA SUD-AMERICANA DE BILLETES DE BANCO, Buenos-Aires.
Primera Reunion del Congreso-Cientifico Latino-Americano, celebrada en Buenos-Airesdel 10 al 20 de Abril de 1898. 4 trabajos de la 3a Seccion (Ciencias Medicas) 1898.

EICHEPAREBORDA, AUGUSTIN Buenos Aires.
La Tuberculose dans la République Argentine. Par le Dr Samuel Gache. 1899

F A. DAVIS COMPANY Philadelphia.
Annual and Analytical Cyclopædia of Practical Medicine. By C R. de M. Sajous M.D, and others. Illustrated. Vol. iii. 1899

FROWDE, HENRY Amen Corner London, E.C.
Medical Missions in their Relation to Oxford: an Address to the Oxford University Junior Scientific Club. By Sir H. W Acland, Bart. Second edition. With an Account of the Institute of Scientific Research for India. By Mr J M. Tata. 1899. Price 1s. net.

GLAISHER, H J., Wigmore-street, London, W
On the Study of the Hand for Indications of Local and General Disease. By Edward Blake, M.D Second edition. 1899 Price 3s. 6d. net.
Clinical Lectures on Neurasthenia. By Thomas D Savill, M.D 1899. Price 5s net.

HANBURY F J, 37, Lombard-street, London, E.C.
Flora of Kent. By Frederick J Hanbury F L.S., and R. S Marshall, M.A., F.L.S. With two Maps. 1899.

KEGAN PAUL, TRENCH, AND CO Charing-cross-road, London.
Sewage Analysis: a Practical Treatise on the Examination of Sewage and Effluents from Sewage. By J A. Wanklyn and W J Cooper 1899 Price 7s. 6d.
Victor von Richter's Organic Chemistry or Chemistry of the Carbon Compounds. Edited by Professor R. Anschutz, translated by E. F Smith. Vol. i. Illustrated. 1899 Price 16s

KIMPTON, H. High Holborn London.
Progressive Medicine: a Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by H A. Hare, M.D Vol. i. March 1899. Price 12s 6d net

MASSON ET CIE, Paris
Traité de Médecine. Deuxième édition. Tome i., par L. Guignard, A. Charrin, P le Gendre, et G H. Roger Tome ii., par A. Chantemesse, F Widal, L. H. Thoinot, L. Guinon, E. Boix, A. Ruault, W Attinger et L. Tollemer 1899.

PULMAN GEO, AND SONS Thayer-street, London, W
The Phonographic Medical Library Vol. iii.: Some Diseases of the Rectum and Anus. By Sir William Thomson, F R.C S Irel. 1899. Price 2s. 6d.

REBMAN PUBLISHING COMPANY Shaftesbury avenue, London W C
International Directory of Laryngologists and Otologists. Containing Names and Addresses of Practitioners engaged in the Study and Practice of Laryngology and Otology Compiled by R. Lake, F.R.C S. 1899. Price 3s. 6d. net.

SEGG J P, AND CO Regent-street, London.
The Hygiene of the Mouth A Guide to the Prevention and Control of Dental Diseases. By R. D Pedley, F R.C S Edin. L.D S Eng Illustrated. Price 2s. 6d.

SPOTTISWOODE AND CO. Gracechurch-street, London.
The Medical Register, 1899. The Dentists Register 1899.

WAHR, GEORGE, Ann Arbor
Laboratory Work in Bacteriology By F G Novy, Sc.D, M.D Second Edition. Illustrated. 1899

WRIGHT JOHN AND CO Bristol.
Animal Simples approved for Modern Uses of Cure. By W T Fernie, M.D 1899 Price 6s

VOGEL, F C W, Leipsic.
Die Behandlung der Tuberculose mit Zimmtsäure. Von Dr Albert Landerer 1898.
Anweisung zur Behandlung der Tuberculose mit Zimmtsäure. Von Dr A. Landerer 1899
Deutsches Archiv für Klinische Medicin. 64 Band. 1899

The Royal British Nurses Association Incorporated by Royal Charter, Roll of Members, 1899 with Appendices. Offices, 17 Old Cavendish-street, London, W—The Catechism Series: Examination Questions in Practice of Medicine, with Answers Part 3. Fevers. (E. and S Livingstone, Edinburgh) price 1s. net.—Public School Writing Book, specimen No 4 (Allman and Son, 67 New Oxford-street, London. 1899)

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor not later than 9 o clock on the Thursday morning of each week, for publication in the next number

ANDREWS, HENRY RUSSELL, M.D Lond. M.R.C S L.R.C P, has been appointed Obstetric Registrar and Tutor to the London Hospital, Whitechapel road, E

BRISCOE, J C M.R.C S. L.R.C P has been appointed House Physician to King's College Hospital London.

CHEESEMAN Dr has been appointed Medical Officer for the Chewton Mendip District by the Wells Board of Guardians vice J J Hanly

COWIE, R. M. M.R.C S L.R.C P has been appointed Surgical Registrar to King's College Hospital, London

CRISPIN, R S, M.R.C S., L.R.C.P has been appointed House Surgeon to King's College Hospital, London.

FAWSSETT F, M.B. B S. Lond. L.R.C P M.R.C S., has been appointed Medical Officer for the Fourth Sanitary District of the Chailey Union.

FEMA C E M.B Durh., M.R.C.S., L.R.C P has been appointed Assistant House Accoucheur to King's College Hospital London.

GARD H. L R.C.P L.R.C S Edin., L.F.P S. Glasg. has been appointed Medical Officer for the Northern Sanitary District of the Parish of Devonport

GLOVER, W K. M.B., Ch.B. Aberd. has been appointed Medical Officer for the First "A" Sanitary District of the Dartford Union.

GRAVELY R. M M.R.C S has been appointed Medical Officer for the Chailey Workhouse of the Lewes Union, and re-appointed Medical Officer of Health by the Chailey Rural District Council.

GREENWOOD FRANK R. M.R.C S L.R.C.P Lond. has been appointed Resident Medical Officer to the Children's Hospital, Birmingham.

GUY J M.B., C M. Glasg., has been appointed Assistant Medical Officer at the Infirmary of the Leeds Union.

HOGAN B. L.S.A. has been appointed Medical Officer for the Bromley Workhouse by the Stepney Board of Guardians.

KELSALL, R., M.B., Ch.B Vict. has been appointed Medical Officer for the Union Workhouse by the Chorlton Board of Guardians.

LEGGE, W H. M.R.C S has been re-appointed Medical Officer for the Second Sanitary District of the Chailey Union.

MACKAY J S M.D St. And. D P.H. Edin. has been appointed Physician to the new Infectious Diseases Hospital Kirkcaldy Fife.

MACMULLEN W D M.R.C.S L.R.C.P, has been appointed Assistant House Physician to King's College Hospital London.

MOORE, J W L.R.C.P L.R.C.S Edin. has been appointed Medical Officer and Public Vaccinator for the Sanitary District of Miles Platting

MORT FRANK, M.B. has been appointed a Clinical Assistant to the Chelsea Hospital for Women.

MOWLL, R. R. L.S.A. has been appointed House Surgeon to King's College Hospital, London.

NASH, JAMES T C M.B C M. D P H has been appointed an Assistant in the Bacteriological Department of King's College London.

NEAVE, EDWARD F M, M.B. Ch B Edin. has been appointed House Physician to the Hospital for Women, Soho-square London W

OLIVER, H S L.S.A., has been appointed Medical Officer of Health by the *Romney Marsh Rural District Council.*

PARKER, W L.R.C P Lond., M.R.C S has been appointed Medical Officer for the Schools of the Parish of St Mary, Islington.

PARSONS, A. R C M.R.C S L.R C P has been appointed House Surgeon to King's College Hospital, London.

PITTWAY EDGAR, L.S.A. Lond. has been appointed District Medical Officer and Public Vaccinator for the Sampford District of the *Saffron Walden Union*

POWNE, L M.R.C S has been re-appointed Medical Officer for the Newton, St. Cyres, and Shobrooke Sanitary Districts of the Crediton Union.

RICHARDSON W H. L.R.C P L.R.C S Edin. L F P S Glasg has been appointed Medical Officer for the Union Workhouse by the Chorlton Board of Guardians

RISDON GEORGE OWEN L.R.C P Lond., M R.C S L.S A., has been re-appointed Medical Officer for the No 2 District by the Wells Board of Guardians.

ROBERTS, G A. M.R.C S L.R C P, has been appointed House Physician to King's College Hospital, London.

SAUNDERS L D, M R.C.S, L.R.C P has been appointed House Accoucheur to King's College Hospital, London.

SMITH, C M R.C S has been re-appointed Medical Officer by the Marnock Parish Council.

STEWART A. R. L.R.C P L.R.C S Edin L F P S Glasg, has been appointed Medical Officer for the Newton Heath Sanitary District of the Prestwich Union

STOKES R. L. L.R.C P Lond. M.R C S has been re-appointed Medical Officer for the Third Sanitary District of the Chailey Union.

STONE, F W S. L.R.C P L R.C S Irel. has been appointed Medical Officer for the Sanitary District of Kelston and Northstoke of the Keynsham Out-relief Union.

SUTTON W L. has been appointed Public Analyst by the East Suffolk County Council

THOMAS L. KIRKBY M.R.C S L.R.C P Lond. has been appointed Resident Surgeon to the Children's Hospital, Birmingham

WEBB JOHN EUSTACE, M.B., C M Aberd. has been re-appointed Medical Officer of Heath for Looe Cornwall.

WHITTON A. B M B C M. Edin., has been re-appointed Medical Officer of Health for Aberchirder Banff

WRIGHT P P L.R.C P Lond. has been appointed Medical Officer for the Upper Holloway East Sanitary District of the Parish of St. Mary Islington.

WYLIE, ANDREW M.D, has been appointed a Clinical Assistant to the Chelsea Hospital for Women.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

BATH.—EASTERN DISPENSARY —Resident Medical Officer Salary £130 a year with furnished apartments coal, gas, and domestic attendance Applications to Colonel Byre, Hon. Sec., Rockville Lansdown, Bath.

BOROUGH HOSPITAL, Birkenhead.—Senior House Surgeon. Salary £100 a year with board and washing (no wine, spirits or beer) Also Visiting House Surgeon, to attend the sick poor in their own homes Salary £75 a year with board, lodging, and washing (no wine spirits, or beer) Certain fees also obtainable

BRADFORD CHILDREN'S HOSPITAL.—*House Surgeon Salary £70 with* board, residence, and washing

BRIGHTON, HOVE, AND PRESTON DISPENSARY Queen's-road, Brighton.—House Surgeon to the Western Branch, unmarried. Salary £140 per annum, with furnished apartments, coals, gas, and attendance (no board allowed or locum tenens paid by the institution).

BRISTOL GENERAL HOSPITAL.—House Surgeon for three years conditionally Salary £120 per annum, with board, residence &c. in the house.

BRITISH OPHTHALMIC HOSPITAL, Jerusalem.—Assistant Surgeon at Jerusalem, for the remainder of the present year Passage out and home paid and an honorarium of £100. Applications to the Honorary Secretary 72, Cheapside, London, E.C

BURY INFIRMARY —Junior House Surgeon Salary £60, with board residence, and attendance.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST Victoria park, E —Second House Physician for six months. Salary at the rate of £30 per annum, with board and residence.

CRAIGLEITH POORHOUSE AND HOSPITAL, Edinburgh.—Resident Medical Officer Salary at the rate of £80 per annum, with board. Applications to the Clerk, Parish Council Chambers, Castle-terrace, Edinburgh.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY *Dumfries.*—House Surgeon. Salary £50 per annum, with board and washing. Also Assistant House Surgeon Board and washing provided.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN Glamis road, Shadwell, E.—House Physician Board and residence &c. provided, and an honorarium of £25 granted conditionally

GLAMORGAN COUNTY ASYLUM Bridgend.—Junior Assistant Medical Officer Salary £130, rising £10 a year to £150 if approved, with board (no beer or wine), lodging, and washing

GREAT NORTHERN CENTRAL HOSPITAL, Holloway road, N —Junior House Physician for six months. Salary at the rate of £30 per annum, with board lodging and washing in the hospital.

HOLLOWAY SANATORIUM Virginia Water —Senior Assistant Medical Officer Salary commencing at £300 per annum, with board, lodging, and washing

HOSPITAL FOR DISEASES OF THE SKIN 52 Stamford-street, Blackfriars, London, S E.—Assistant Physician or Assistant Surgeon.

KENSINGTON DISPENSARY Church street, Kensington, W —Vacancy on the Honorary Medical Staff Applications to Mr T W O Wheeler 133 Kensington High street W

KIDDERMINSTER INFIRMARY AND CHILDREN'S HOSPITAL.—House Surgeon, unmarried Salary £140 increasing £10 per annum to £170, with rooms in the Infirmary and attendance (option of board at £40 per annum)

LIVERPOOL DISPENSARIES 34 Moorfields Liverpool —Assistant Surgeon unmarried Salary £100 per annum with board and residence.

LONDON COUNTY COUNCIL.—Scholarship in Sanitary Science of the value of £150 a year tenable in the Pathological Laboratory of the Claybury Asylum. The Scholarship will be awarded in the first *instance for one year but may be renewed.* Candidates may be either men or women. Applications to the Secretary of the Technical Education Board, 116, St. Martin's-lane W C

LONDON THROAT HOSPITAL, 204 Great Portland street W —House Surgeon for six months

MANCHESTER ROYAL INFIRMARY —BARNES CONVALESCENT HOSPITAL, Cheadle.—Clinical Assistant at the Barnes Convalescent Hospital *for six months. Board and residence provided and an honorarium* of £25 given.

MASON UNIVERSITY COLLEGE, Birmingham (with QUEEN'S FACULTY OF MEDICINE).—Professor of Pathology and Bacteriology

NORTH EASTERN HOSPITAL FOR CHILDREN Hackney road Shoreditch.—Surgeon. Also House Surgeon for six months. Salary at the rate of £50 per annum. Applications to the Secretary City Office 27 Clement's-lane, Lombard street, E.C

NORTH WEST LONDON HOSPITAL, Kentish Town-road, N W —Dental Surgeon. Also Assistant Resident Medical Officer for six months Salary at the rate of £30 per annum.

NORTH LONDON HOSPITAL FOR CONSUMPTION Hampstead (Offices 41, Fitzroy square W) —Assistant Resident Medical Officer for six months. Honorarium at the rate of £30 per annum.

PARISH OF BIRMINGHAM —Assistant Resident Medical Officer at the Workhouse Infirmary for one year Salary £100 per annum, with furnished apartments rations (no alcoholic liquors) coals, gas laundry and attendance. Applications to the Clerk to the Guardians, Parish Offices Edmund-street

ROYAL BERKS HOSPITAL, Reading —Assistant Surgeon

ROYAL EAR HOSPITAL London.—Non resident House Surgeon for six months. Honorarium at the rate of £24 per annum Applications to the Hon Sec., Frith street, Soho, W

ROYAL VICTORIA HOSPITAL, Bournemouth.—House Surgeon. Salary £80 per annum, with board

SALFORD ROYAL HOSPITAL.—Two Honorary Medical Officers for the Pendleton Branch Dispensary

ST PETER'S HOSPITAL FOR STONE &c. Henrietta-street, Covent Garden London.—House Surgeon for six months. Salary at the rate of £100 a year with board, lodging, and washing

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—House Surgeon for two years Salary £100 per annum with board lodging, and washing Also Assistant House Surgeon. Salary £50 per annum, with board lodging and washing

TUNBRIDGE WELLS EYE AND EAR HOSPITAL.—Lady House Surgeon. Salary £60 per annum, with board and residence

UNIVERSITY OF ST ANDREWS —Professor of Pathology

VICTORIA UNIVERSITY THE YORKSHIRE COLLEGE, Leeds.—Lecturer on Practical and Operative Surgery Emoluments from students fees only Also Junior Demonstrator in Pathology Salary £120

WEST RIDING ASYLUM Wadsley near Sheffield.—Fifth Assistant Medical Officer Salary £100 per annum rising £10 a year up to £150, with board, &c.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL Wolverhampton.—House Surgeon. Salary £100 a year with board, lodging and washing

Births, Marriages, and Deaths.

BIRTHS

APPLEYARD —On April 8th at Umtali Rhodesia the wife of F E. Appleyard, M.B B C Cantab. Surgeon to the British South Africa Company's Hospital of a daughter

BARRATT —On May 9th, at Canterbury the wife of Major H J Barratt, Royal Army Medical Corps, of a daughter

THOMSON —On May 13th, at Queen Anne-street, the wife of H Campbell Thomson M.D of a daughter

THOMSON —On May 13th, at 243, Queen's-road New Cross gate S E. the wife of David Thomson, L.R.C P Edin. L R C S Edin, L F P S Glasg of a daughter

MARRIAGE

ENSOR—COX.—On May 16th, at Minchin Hampton Parish Church Cecil Arthur Ensor M R.C S L.R.C P younger son of John Arthur Ensor surgeon, of Tisbury Wilts, to Irene Margarita Cox, daughter of the late Edward Gordon Cox of Hyde Brae Gloucestershire.

DEATHS

BARNES.—On April 5th, in Perth Hospital West Australia John Shepperson Barnes, M.D, B.C. Cantab. eldest son of John M Barnes, Esq of Morningthorpe *Norfolk, after a prolonged and* trying illness.

GRIMBLY —On May 14th at The Grange Summertown *Oxford* Richard Grimbly M.R.C S., formerly of Banbury Oxon, aged 84 years.

WATTS —On May 12th at Battle William Edward Monckton Watts, M.R C S aged 69 years

N B —A fee of 5s is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 12th, 1899.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rainfall.	Solar Radiation in vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
May 12	29·93	S.W	...	103	66	49	50	53	Cloudy
13	29·81	W	0·02	109	65	49	49	52	Overcast
14	29·69	S.W	0·45	88	61	52	54	53	Cloudy
15	29·33	W	...	103	62	49	49	50	Raining
16	29·57	W	0·09	115	65	49	50	54	Cloudy
17	29·72	W	0·44	111	64	50	50	54	Stormy
18	29·90	S.W	...	114	70	52	55	59	Hazy

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS.

MONDAY (22nd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) St. George's (2 P.M.), St. Mary's (2.30 P.M.) Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (23rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.) London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (24th).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) Cancer (2 P.M.)

THURSDAY (25th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.) St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) St. Mark's (2 P.M.).

FRIDAY (26th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.) St. Thomas's (3.30 P.M.) Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.) St. Mary's (2 P.M. Ophthalmic 10 A.M.), Cancer (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (27th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) St. Mary's (10 P.M.), London Throat (2 P.M.)

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily

SOCIETIES

TUESDAY (23rd).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover square, W.).—8.30 P.M. Dr Sherrington The Spinal Animal (illustrated by diagrams and lantern slides).

THURSDAY (25th).—DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND (20, Hanover square, W.).—4.30 P.M. Annual Meeting. Mr Jonathan Hutchinson will read a Paper and open a Discussion on Diseases of the Nails with special reference to their Significance as Symptoms. Exhibition of cases, drawings, microscopical preparations, &c.

FRIDAY (26th).—CLINICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Annual General Meeting. Election of Officers for Session 1899-1900. Papers.—Mr H. B. Robinson: Acute Intestinal Obstruction caused by an Adherent Vermiform Appendix forming a Band associated with Foetal Arrangement of the Peritoneum.—Dr C. Fox: A Case of Generalised Hæmorrhagic Erythema in Bright's Disease.—Mr H. Allingham: A Case of Aneurysm of the Subclavian Artery. Ligature of the first portion of the Vessel followed in 23 days by Removal of the Aneurysm. The patient will be shown.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

TUESDAY (23rd).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr Ormerod Hysteria.

WESTLAND HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM (73, Welbeck street, W.).—4 P.M. Dr F. Peach: Mental Disorders in Children.

WEDNESDAY (24th).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr Green: Hæmoptysis.

THURSDAY (25th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn road, W.C.).—5 P.M. Dr D. Grant: Diagnosis and Treatment of Obstructive Disease.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL (Hyde-park-corner, S.W.).—3 P.M. Dr W. H. Dickinson: Fragments of Pathology and Therapeutics (Baillie Lecture).

CHARING-CROSS HOSPITAL.—4 P.M. Mr Wallis: Demonstration of Surgical Cases. (Post-Graduate Course).

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Mr Pitts: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr H. Lloyd Williams: Treatment of Fractured Jaw

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES

TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect.

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The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any or the copies so supplied. Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND.

MASSAGE THE REAL AND THE SPURIOUS

WE have received the following letter from a properly taught masseur who no doubt has suffered as all genuine masseurs have suffered by the practices which have been carried on under the name of massage —

Re MASSAGE.

To the Editors of THE LANCET

SIRS,—In view of the recurring massage scandals should not something be done in the way of registering those who practise massage and should not all massage establishments (if there must be such establishments) be duly licensed? And also should not something be done in the way of requiring a minimum knowledge of their art by those so registered?—say a two years' curriculum to embrace anatomy, physiology and pathology and mechanics (chiefly animal mechanics) with training in practical massage work including a knowledge of its physiological and therapeutical uses and effects and the education of the hand, *if besides they are required, or undertake under the* guidance of the medical man to apply electricity to the human body that they should have a proper training in that branch of science then, lastly that it should be made illegal for anyone to practise massage except under the supervision or by the recommendation of a duly qualified medical man, as is mostly done already by all right-minded and respectable masseurs and masseuses. I am, Sirs yours faithfully,

A MASSEUR.

This is not the first communication of its sort that has reached us and there is no doubt that the questions raised are of considerable interest to the medical profession Massage and applied electricity are valuable agents in medical treatment, and it is intolerable that the public should be to a great extent deprived of their benefits because a group of unscrupulous quacks or infamous *procureurs* have wrongfully described their proceedings under one or both terms. It reflects nothing but discredit upon our state and municipal legislation that it should have been possible for these persons so long to have kept up the pretence of ministering to the health of their clients when in reality they were pandering to their vices. We do not suppose that the medical profession has suffered in the least from the assumption of medical titles by persons like "Dr" Hill Wilson—though it is none the less an unfortunate circumstance that they should have attempted their imposition so long with impunity—but the genuine masseurs and masseuses, as well as the attendants who can undertake to carry out the details of electrical treatment—who comprise a class of most valuable assistants to medical service in a variety of conditions—undoubtedly have been severely injured by the ill-deeds wrought in their names. No young woman has publicly announced herself as a masseuse for the last year or two without knowing that some persons will consider that she is simply a *fille de joie* To a certain extent the male masseur has fallen also into disrepute. A large section of the public, again, *forego such treatment if possible* even when ordered it. They know what "taking a course of massage" has too often meant of late and do not care to run the risk of putting into the minds of their friends and neighbours disgusting suspicions Under these circumstances it is not surprising that we should have already received several communications in the spirit of the one which we print above, and before making further comment upon it we wish to say that all right-minded and respectable masseurs and masseuses have our best sympathy in the disagreeable predicament in which they have been placed by the supineness of municipal government.

With regard to a proposal for registering the persons who practise massage we do not think the proceeding necessary Of course if registration were deemed advisable it would follow that a minimum of knowledge would be required from the registered, or rather it would be to ensure such a minimum of knowledge that registration would be enforced by law But we do not think that there is any necessity whatever for registration because we cannot conceive anyone falsely pretending to practise massage who is not so pretending for immoral purposes and with such immoral persons the law should be able to deal, for we agree with our correspondent "A Masseur" that the public, as a rule, employ genuine masseurs and masseuses only under the supervision of a medical man and the medical man in this way protects them from the simple impostor And on similar grounds we do not consider that there is anything to be gained by the licensing of houses as places of massage. The only institution that can pretend to be a place of massage and not be one *is, as far as our imagination serves us*, a brothel, and the municipal authorities have already discretion to deal with brothels.

Our correspondent's proposal that masseurs and masseuses should be registered will not find much support among the thoughtful, whether medical or lay The registration of a body of men and women after a curriculum extending over two years and embracing the study of anatomy physiology, and pathology would be a virtual repeal of the present *Medical Acts. Who would keep such persons* within the intended limits? It would follow to a certainty that a half-educated medical order would be instituted and would usurp medical practice in every direction to the detriment of the public health. It is quite sufficient that masseurs and masseuses should be able to satisfy the medical practitioner at whose suggestion the adjunct to treatment is being employed that the routine of massage is familiar to them there is no necessity for them to be pathologists or diagnosticians.

IS IT QUACKERY?"

To the Editors of THE LANCET

SIRS —Although it no doubt is right and proper that every person who practises the "Swedish Movement Treatment"—or what may perhaps be more scientifically called the Treatment of Disease by Therapeutic Exercises—should be a fully qualified medical man yet I think that Enquirer is rather hard on Mr T P von Braun because he wrongly (?) diagnoses what possibly might have been a somewhat difficult case of abdominal trouble. Congestion of the liver is an exceedingly vague term and is used very loosely both in the profession and outside it. However what I desire to emphasise *is that in chronic* diseases of the digestive organs as in chronic *diseases generally* with a few exceptions the treatment by therapeutic exercises is exceedingly useful and has succeeded where other methods of treatment have failed. In conclusion I beg to say that I am not acquainted with Mr von Braun either personally or otherwise.

I am Sirs, yours faithfully

OTTO HOLST, M.R C S Eng., L.R.C P Lond.

Eastbourne, May 17th 1899

THE CORPORATE AND MEDICAL REFORM ASSOCIATION

THE following is the list of subscribers to the Voluntary Fund raised by the Corporate and Medical Reform Association, Limited, to meet the expenses incidental to the presentation of their Memorial (see THE LANCET, May 6th, 1899, p. 1270), to the General Medical Council:—

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"SUPERFLUOUS HAIR."

To the Editors of THE LANCET

SIRS,—As the result of the consultation which has been held in the columns of THE LANCET on "M.D s" case it is clear that none of us is very much in favour of electrolysis as a means of removing the juvenile feminine moustache The male advisers, all three of us, adopt a mildly coercive tone I myself was for letting the patient severely alone, having framed the prognosis that in a case of this kind she would not do what in my view she ought to do. Mr Miller is for gently reasoning her out of her repugnance which, although strictly the right course is of very doubtful efficacy while "P J F K." is for *mildly coercing* not the patient but "M.D" himself by telling him that it would "perhaps be wise for him to have a consultation in the usual way although it is obvious that "M.D" prefers a consultation in the columns of THE LANCET The only bright suggestion amidst these abortive proposals comes from one of the 15 lady M.D 's of the University of London. This contributor joins the conference equipped with the faculty of intuition and a capacity of taking an all round view of the situation and she aims at not the best thing, but the best thing that is practicable—namely, by giving the patient, through peroxide of hydrogen, a prematurely white and therefore less conspicuous moustache. The suggestion is altogether novel and is well worth weighing. Chloride of lime would do the same thing but it is extremely irritating to the skin. Peroxide of hydrogen (as Dr Ethel

Williams suggests) is far better. But I should like, with her permission, to ask her for further information. Some time ago I was making experiments as to the bleaching properties of chloride of lime and of peroxide of hydrogen respectively on the hair. These experiments were conducted on hair removed from the head, which hair I immersed in a bottle containing the solution. I found chloride of lime by far the more potent as a bleacher—that is to say by far the more rapid in its action—but I also corroded the hair very much more than did the peroxide. However, the peroxide nevertheless corroded the hair in a very tangible degree, as evidenced by the fact that it broke under forcible traction applied to it far more readily than was the case with sound hair. This would be no disadvantage for the purpose now in view but I have noticed that, as a general rule, substances which corrode the hair corrode also the epidermis, and when it is a question of the upper lip irritate the skin very considerably. Dr Ethel Williams very wisely insists that the hairs must be well soaked in the peroxide solution this precaution, as my own experiments showed me, is absolutely necessary for the bleaching of hair by this means. Short of a thorough and indeed a somewhat prolonged soaking in it the peroxide will not bleach hair but will render hair (originally dark) at first red and then, after longer action yellow. Indeed, peroxide of hydrogen is largely sold—disguised under various fancy names—for the purpose of conferring golden tresses on dark haired women.

Now what I should like to ask Dr Ethel Williams is whether the peroxide when applied habitually in sufficient force and sufficiently long to bleach completely a black (feminine) moustache, is found in her experience to irritate conspicuously the skin of the upper lip, more especially at the "angles" of the mouth? I have found that the habitual use of depilatories to the upper lip is apt to make the skin at the angles of the mouth very raw indeed, and that even the use of pumice-stone (a favourite plan with many women) is wont to have the same effect. The ancient Gauls it is true, wore only the moustache and cleared away the beard and whiskers; and they did this by cutting the whisker and beard hair off with scissors and grinding the stumps away with pumice-stone. But they left the moustache and so did not have to operate with pumice on the most tender parts of the hair-covered region of the face—that is to say the skin around the angles of the mouth. The cheeks and chin will support with fortitude treatment which the upper lip is yet unable to tolerate.

It may perhaps, be useful to inquire what is the cause of the strong aversion on the part of moustached young women to the use of the razor. The aversion is insuperable but the reason of it is very creditable. As far as I have been able to ascertain by inquiry it comes to this. The girl shrinks from being a fraud to the man whom she may marry. Her view is that if she can get her moustache permanently removed by some device, electrolysis or what not, she seems to be a woman without a moustache and veritably is so. That she used to have a moustache is no matter. She has one no longer. She has been completely cured of that. But if by dint of regular shaving she seems to be a woman without a moustache and yet is not in truth what she seems to be that in her view makes all the difference when it comes to the question of marriage. No doubt she is right. In this country where feminine moustaches are the exception, some men might find difficulty in reconciling themselves to the discovery. To this conscientious objection is added one of a material kind, and that is the mistaken, but none the less firm, belief that cutting makes the hair grow more thickly. This belief is doubtless based on the universally familiar effect of lopping or pruning on plants and is the outcome of arguing from the known to the apparently but not really similar unknown. One may think, if one pleases, that if one will only explain to her &c., *but*—

> If she won't, she won't,
> And there's an end on't."

I am, Sirs, yours faithfully

May 12th 1899. BALLANTYNE SQUIRE.

WHERE SHALL WE BUILD OUR NATIONAL SANATORIA FOR CONSUMPTIVES?"

To the Editors of THE LANCET.

SIRS,—Will you permit me as a practitioner in the district referred to by your correspondent Dr J. E. Squire, to corroborate and in some sense, supplement the statements made by him in THE LANCET of April 1st, 1899. I would draw attention to and emphasise the fact that shelter can easily and always be obtained from the east and north winds and that the prevailing wind—from the west—is warm, bracing and uncontaminated. In this corner of Somerset phthisis is a disease conspicuous by its rarity and this applies equally to all other pulmonary affections. The majority of the inhabitants [illegible] from old age—last year for instance seven deaths being in people over 80 years and 16 over [illegible] in a population under 3000.

Although [illegible] phthisis is almost unknown [illegible] here [illegible] the change, and I should like to mention one in which [illegible] improvement took place. The patient was an unmarried woman, aged 20 years [illegible] by her medical man [illegible] the left apex with cough, night sweats [illegible] loss of weight [illegible] of food and suppressed menstruation [illegible] thoroughly miserable [illegible] this [illegible] life [illegible] all [illegible] the [illegible] and [illegible] was [illegible] on the patient a good deal of firmness being needed in this direction. Seven weeks under personal supervision resulted in quite unexpected improvement, the appetite being regained with increase of weight and return of the menstrual function. The patient had then to return home promising to lead the same kind of life. I heard occasionally that she was progressing favourably and coming in from my round last Thursday I was astonished to see the same girl altered out of all recognition—ruddy robust, and vigorous—to all intents and purposes cured. I quote this case having been under my care nearly a year—others being under observation still—merely as an instance of many which have been treated successfully by my brother practitioners and myself.

I am, Sirs, yours faithfully

GEORGE BOYD, M.R.C.S. Eng., L.R.C.P. Lond.

Portishead, Somerset, May 15th, 1899.

THE METHODS OF SUICIDES.

To the Editors of THE LANCET.

SIRS,—I should be very much obliged if any of your readers could inform me whether there is any book published containing records of the different means which have been adopted by suicides, especially as regards wounding. I am anxious to collect some details of cases which, though undoubtedly suicide, have had more the appearance of homicide. I am, Sirs, yours faithfully

May 15th 1899. M.B.

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H. KINGSLEY HUNTER, L.S.A.

MR. RIVERS WILLSON, 42, Wellington-street, Oxford, the treasurer, announces the receipt of the following subscriptions to the fund in behalf of the widow of the late Mr. H. K. Hunter:—

	£	s.	d.		£	s.	d.
Mr J. Noble Bredin ...	1	1	0	Mr Randle Harper ...	0	5	9
Dr Stephen Nesfield	0	10	0	Mr Rivers Willson ...	2	2	0
Mr Robt. T. Jenkins ...	1	1	0				

"DRY SPARKLING WINE.

WITH reference to the analysis of this wine which was published in THE LANCET of May 6th, 1899, the Vineyard Basket Co., Ltd., point out that the acetic acid is given as 0·63 per cent., whereas it should have been 0·063 per cent. The error was due to a slip in placing the decimal point.

M.D. (U.S.A.)—We are aware that the subcutaneous injection of testicular secretion has been stated to produce marvellous results in certain diseases but we are not acquainted with any authoritative corroboration of these statements. On the contrary we have knowledge of the reverse—i.e., that the use of this product has proved quite valueless.

S. Africa.—The advertisers in question are not medical men but simply quacks. If they were medical men the fact of their advertisements appearing in the colonies only would not save them from being struck off the Register.

T. E. W. would feel grateful if any reader of THE LANCET could give the address of a school where boys of perverted moral habits are received, expense being a secondary consideration to cure.

M.B., M.R.C.S.—This is clearly the case of a grateful patient showing his feelings towards his medical man in an indiscreet manner. The medical man is to be commiserated with.

Disgusted.—We have referred to this matter before. It is not easy for a man in practice to get practical instruction of that kind.

M. B. (Liverpool) is thanked for his letter which is receiving attention.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received: *Western Morning News, Bristol Times and Mirror, The Sun, Nottingham Guardian, Warwick Advertiser, Widnes News, Warrington Observer, Lancaster Standard, Bradford Observer, South Wales Daily News, Birmingham Daily News, Glasgow Herald, Dundee Advertiser, Scotsman, Cornish Mail, Hastings News, Times of India, Pioneer Mail, Hull Daily News, Herts Reporter, Isle of Wight Express, Launceston Post, Bath Weekly Argus, Midland Herald, Harwich Chronicle, Whitehaven Advertiser, Citizen, Chorley Standard, Architect, Bury Guardian, Wigton Advertiser, Pontefract Express, Normanton Herald, Lancaster Guardian, City Press, Gloucester Journal, Brentwood Courier, Builder, Atherstone Observer, Deal Chronicle, Liverpool Daily Post, Kentish Chronicle, Yorkshire Post, Brighton Gazette, Leeds Mercury, Le Figaro (Paris), Bristol Mercury, Surgery Record, E. J. Standard, Rede r News, Stamouth Observer, Mining Journal, Local Government Chronicle, Hertfordshire Mercury, Isle of Man Daily Times, Reading Mercury, Surrey Gazette, Halifax Courier, Local Government Journal, Surrey Advertiser, Carmarthen Herald, Daily Free Press (Aberdeen), Aberdeen Herald, Epworth Herald, Dorking Advertiser, Wellingborough Weekly, Dover Times, Crewe Guardian, [illegible].*

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Remarks

ON

PROPER AND IMPROPER BURIAL, WITH AN EXAMINATION OF THE CLAIMS MADE FOR CREMATION.

BY SIR FRANCIS SEYMOUR HADEN, F.R.C.S. ENG.

THE present communication is intended to be in no way controversial. In 1875—nearly a generation ago—it will be recollected by some, and necessarily forgotten by many, that I wrote certain letters to the *Times* in deprecation alike of the serious but readily removeable abuses which disfigure our cemeterial system and of the dangerous and wholly insufficient resources of cremation as a suggested substitute for it To-day, without the least intention of reviving a discussion which, in the face of combination, the attractions of the advertisement, and the methods of the newspaper, I have found to be useless, I do nevertheless desire—and that in the columns of a press which is alone competent to deal with the subject on its technical side—to leave behind me such an epitomised version of my share in the matter as I care to be permanently identified with I had hoped to be able, to do this without any reference whatever to the statements which cremation relies upon to advance its interests I have not found that possible Some sort of visible connexion between the statements made on one side and the other has proved to be necessary to an intelligible comprehension of either of them, and this all the more that, while some of my own have been both written and printed, others of them, though written and sent to the press, have not as yet been permitted to see the light I have therefore taken care to preface each pronouncement of my own by the cremationist statement which called it forth, and of course to reverse the order of precedence when the fact happens to have been the other way I may also state that my object in choosing the present moment for this final record of my views has been the delivery by Dr G V Poore of the Milroy Lectures and their reproduction both in THE LANCET and the *British Medical Journal* For some such summary of the scientific aspects of the case—though hardly expecting it to come in my own time—I have in a sense been long waiting I had, of course, not seen the lectures or had any knowledge of the form they would take, and if, now that I have seen them, I find myself venturing to take exception to certain details of terminology which appear to me to impair their value I may say at once that such details in no way affect the authority of their conclusions with which it will be seen I am heartily in accord Nor am I, I trust, unduly elated to find those conclusions, while confirmatory of my own views, altogether out of harmony with the alarming pronouncements of the *Times* I have nothing however, to say against the *Times* My relations with it have been of the very best all my life and they are not likely to alter now because it happens to have changed its editor and the editor the views of the paper

THE CASE FOR CREMATION

On Jan 12th, 1875, I wrote in the *Times* as follows —

'Interment, the apostles of cremation tell us, in substance if not in terms and speaking of it in its most comprehensive sense is repulsive in idea, costly and ineffectual in fact, horrible in practice, a vilification of the dead and a danger to the living. In a variety of publications which have excited much attention they denounce not any particular mode of interment or any palpable abuses which they recognise as having crept into the practice to discredit it but the practice itself They take no notice of the fact that the dead are little more than nominally buried and that by the interposition between them and the earth that should resolve them of such media as wood lead brick, and the like, interment as a principle is rendered all but nugatory and as a practice deprived of its *raison d'être*. Finally they leave it to be inferred, since they give us no hint to the contrary that the evils thus created are *inherent in the principle of interment and upon this inference and upon no other ground found their recommendation of cremation.*"

THE CASE FOR PROPER BURIAL

"The case for earth burial may be thus summarised

1. THE NATURAL DESTINATION of all organised bodies that have lived and that die on the earth s surface is the earth.

2. THE EVILS supposed to be inseparable from the principle of interment are independent of that principle and of our own creation.

3. THE SOURCE of these evils is to be found, not in the burial of the dead, but in the unreasoning sentiment which prompts us to keep them unburied as long as possible, and then to bury them in such a way that the earth (or rather the air) can have no access to them.

4. THE PRINCIPLE of burial supposes the resolution of the body by the agency of the earth to which we commit it and that the earth is competent to effect that resolution and to effect it innocuously

5. To seek to prevent THE BENEFICENT AGENCY of the earth by enclosing the dead in imperishable coffins, brick graves, and vaults is in the highest degree irrational, since it engages us in a vain resistance to an inevitable dispensation and has led us to accumulate in our midst a vast store of human remains in every stage and condition of decay

6. UNWARNED and undeterred by the magnitude of the evils we have thus ourselves created we are still engaged in extending and perpetuating them

7. Were the dead only PROPERLY BURIED not one of those evils would have any existence, not a single dead body would remain to encumber the soil and a quantity of land of incalculable value, now hopelessly alienated would be liberated for purposes of hygiene or of utility

8. THE REMEDY for such evils is, therefore, not in cremation or in any of the alternatives that have been proposed for burial, but in a sensible recognition of, and a timely submission to a well-defined law of Nature, and since some of these alternatives are dangerous, in legislative action to enforce the provisions of that law,

9. THE CLAIM that earth has upon its dead, no less than that which the dead have upon the earth is, in short, a proposition too obvious to merit discussion To understand it we need only consider the properties with which the soil at our feet and everywhere at our disposal has been endowed; that it is the most potent disinfectant known and the readiest of application and that, by a combination of forces inherent in it which might well appear contradictory but for the wonderful purposes they are destined to effect it is resolvent and reformative as well that that which under the influence of the air was putrefaction in the earth is resolution that which was offensive becomes inoffensive that which was mere decay a process of revivification To question the competency of the earth thus endowed, to effect the resolution and conversion of its dead, or to fail to perceive and profit by that competency would pass comprehension if habit had not taught us to shut our eyes to it and if the advocates of cremation had not stepped in to tell us that we may improve upon it."[1]

STATEMENT BY THE "TIMES"

On Dec 22nd, 1897, the *Times*, in a leading article in favour of cremation, wrote as follows "By the act of interment," says Sir Henry Thompson, "we literally sow broadcast through the land innumerable seeds of pestilence which long retain their vitality, many of them destined at some future time to fructify in premature death or ruined health to thousands"

SIR SEYMOUR HADEN'S ANSWER TO THIS

My commentary on this remarkable statement was in these terms —

'If this statement is true the whole cosmical fabric on which our knowledge of the world we live in rests must be untrue and the earth instead of the resolvent and disinfectant of all forms of organic decay accruing in the course of nature to its surface no better than a mine at our feet charged with the elements not of our well being but of our destruction. Our now established habit of stamping out cattle plague without fear of its recrudescence by simply burying its infected carcasses in shallow trenches with or without quicklime must be regarded as a myth; and the stay of the great plague itself (never to return by casting any number of its uncoffined victims into pits extemporised in the open streets for the purpose) but an historical figment."

STATEMENT BY SIR CHARLES CAMERON

On August 19th, 1898, in a second leading article, as if to justify the extraordinary statement to which I have referred, the *Times* drew attention to a recent pronouncement made at Dublin by Sir Charles Cameron (also a member of the Cremation Society) to the following effect that it had been borne in upon him that the infection both of diphtheria and typhoid fever was in some way or other connected with the soil.

SIR SEYMOUR HADEN'S ANSWER TO IT

To this I replied, Oct. 3rd, 1898, in a letter (which, however, was *not inserted*) as follows "That as far as I

[1] The Times, Jan. 12th, 1875.

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Remarks on PROPER AND IMPROPER BURIAL, WITH AN EXAMINATION OF THE CLAIMS MADE FOR CREMATION.

By SIR FRANCIS SEYMOUR HADEN, F.R.C.S. ENG.

THE present communication is intended to be in no way controversial. In 1875—nearly a generation ago—it will be recollected by some, and necessarily forgotten by many, that I wrote certain letters to the *Times* in deprecation alike of the serious but readily removeable abuses which disfigure our cemeterial system and of the dangerous and wholly insufficient resources of cremation as a suggested substitute for it. To-day, without the least intention of reviving a discussion which, in the face of combination, the attractions of the advertisement, and the methods of the newspaper, I have found to be useless, I do nevertheless desire—and that in the columns of a press which is alone competent to deal with the subject on its technical side—to leave behind me such an epitomised version of my share in the matter as I care to be permanently identified with. I had hoped to be able to do this without any reference whatever to the statements which cremation relies upon to advance its interests. I have not found that possible. Some sort of visible connexion between the statements made on one side and the other has proved to be necessary to an intelligible comprehension of either of them, and this all the more that, while some of my own have been both written and printed, others of them, though written and sent to the press, have not as yet been permitted to see the light. I have therefore taken care to preface each pronouncement of my own by the cremationist statement which called it forth, and of course to reverse the order of precedence when the fact happens to have been the other way. I may also state that my object in choosing the present moment for this final record of my views has been the delivery by Dr. G. V. Poore of the Milroy Lectures and their reproduction both in THE LANCET and the *British Medical Journal*. For some such summary of the scientific aspects of the case—though hardly expecting it to come in my own time—I have in a sense been long waiting. I had, of course, not seen the lectures or had any knowledge of the form they would take, and if, now that I have seen them, I find myself venturing to take exception to certain details of terminology which appear to me to impair their value, I may say at once that such details in no way affect the authority of their conclusions with which it will be seen I am heartily in accord. Nor am I, I trust, unduly elated to find those conclusions, while confirmatory of my own views, altogether out of harmony with the alarming pronouncements of the *Times*. I have nothing, however, to say against the *Times*. My relations with it have been of the very best all my life and they are not likely to alter now because it happens to have changed its editor and the editor the views of the paper.

THE CASE FOR CREMATION.

On Jan. 12th, 1875, I wrote in the *Times* as follows:—

"Interment, the apostles of cremation tell us, in substance if not in terms, and speaking of it in its most comprehensive sense, is repulsive in idea, costly and ineffectual in fact, horrible in practice, a vilification of the dead and a danger to the living. In a variety of publications which have excited much attention they denounce not any particular mode of interment or any palpable abuses which they recognise as having crept into the practice to discredit it but the practice itself. They take no notice of the fact that the dead are little more than nominally buried and that by the interposition between them and the earth that should resolve them of such media as wood, lead, brick and the like, interment as a principle is rendered all but nugatory and as a practice deprived of its *raison d'être*. Finally they leave it to be inferred, since they give us no hint to the contrary, that the evils thus created are *inherent in the principle of interment and upon this inference and upon no other ground found their recommendation of cremation*."

THE CASE FOR PROPER BURIAL.

The case for earth burial may be thus summarised:

1. THE NATURAL DESTINATION of all organised bodies that have lived and that die on the earth's surface is the earth.

2. THE EVILS supposed to be inseparable from the principle of interment are independent of that principle and of our own creation.

3. THE SOURCE of these evils is to be found, not in the burial of the dead, but in the unreasoning sentiment which prompts us to keep them unburied as long as possible, and then to bury them in such a way that the earth (or rather the air) can have no access to them.

4. THE PRINCIPLE of burial supposes the resolution of the body by the agency of the earth to which we commit it and that the earth is competent to effect that resolution and to effect it innocuously.

5. To seek to prevent THE BENEFICENT AGENCY of the earth by enclosing the dead in imperishable coffins, brick graves, and vaults is in the highest degree irrational, since it engages us in a vain resistance to an inevitable dispensation and has led us to accumulate in our midst a vast store of human remains in every stage and condition of decay.

6. UNWARNED and undeterred by the magnitude of the evils we have thus ourselves created we are still engaged in extending and perpetuating them.

7. Were the dead only PROPERLY BURIED not one of those evils would have any existence, not a single dead body would remain to encumber the soil and a quantity of land of incalculable value, now hopelessly alienated, would be liberated for purposes of hygiene or of utility.

8. THE REMEDY for such evils is, therefore, not in cremation or in any of the alternatives that have been proposed for burial but in a sensible recognition of, and a timely submission to, a well-defined law of Nature, and since some of these alternatives are dangerous, in legislative action to enforce the provisions of that law.

9. THE CLAIM that earth has upon its dead, no less than that which the dead have upon the earth is, in short, a proposition too obvious to merit discussion. To understand it we need only consider the properties with which the soil at our feet and everywhere at our disposal has been endowed; that it is the most potent disinfectant known and the readiest of application and that, by a combination of forces inherent in it which might well appear contradictory but for the wonderful purposes they are destined to effect, it is resolvent and reformative as well; that that which under the influence of the air was putrefaction in the earth is resolution; that which was offensive becomes inoffensive; that which was mere decay a process of revivification. To question the competency of the earth thus endowed, to effect the resolution and conversion of its dead or to fail to perceive and profit by that competency would pass comprehension if habit had not taught us to shut our eyes to it and if the advocates of cremation had not stepped in to tell us that we may improve upon it."[1]

STATEMENT BY THE "TIMES."

On Dec. 22nd, 1897, the *Times*, in a leading article in favour of cremation, wrote as follows: "By the act of interment," says Sir Henry Thompson, "we literally sow broadcast through the land innumerable seeds of pestilence which long retain their vitality, many of them destined at some future time to fructify in premature death or ruined health to thousands."

SIR SEYMOUR HADEN'S ANSWER TO THIS.

My commentary on this remarkable statement was in these terms:—

"If this statement is true the whole cosmical fabric on which our knowledge of the world we live in rests must be untrue and the earth instead of the resolvent and disinfectant of all forms of organic decay accruing in the course of nature to its surface, no better than a mine at our feet charged with the elements not of our well being but of our destruction. Our now established habit of stamping out cattle plague without fear of its recrudescence by simply burying its infected carcasses in shallow trenches with or without quicklime must be regarded as a myth and the stay of the great plague itself (never to return by casting any number of its uncoffined victims into pits extemporised in the open streets for the purpose) but an historical figment."

STATEMENT BY SIR CHARLES CAMERON.

On August 19th, 1898, in a second leading article, as if to justify the extraordinary statement to which I have referred, the *Times* drew attention to a recent pronouncement made at Dublin by Sir Charles Cameron (also a member of the Cremation Society) to the following effect: that it had been borne in upon him that the infection both of diphtheria and typhoid fever was in some way or other connected with the soil.

SIR SEYMOUR HADEN'S ANSWER TO IT.

To this I replied, Oct. 3rd, 1898, in a letter (which however, was *not inserted*) as follows: "That as far as I

[1] The Times, Jan. 12th, 1875.

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law would appear by the evidence given before the Committee by Mr. Braxton Hicks, the well known coroner My own evidence on the point is meanwhile as follows —

EVIDENCE OF SIR SEYMOUR HADEN

3631 "And that" (exhumation), "you think, would be a protection against crime?—*I think it would be the best protection you could get against crime*"

3632 "Then you would still have the body to be exhumed if necessary?—*Yes, certainly*"

3633 "And on that account you would not approve of other methods of doing away with the body other than earth to-earth burial?—*I should approve of no method of doing away with the body except such a method as admitted of its exhumation.*"

3634 "If portions of the viscera were retained, say the stomach and its contents, and portions of the liver and portions of the kidneys were retained, and the body cremated, would that meet your purpose?—*Certainly not, no such retention of those viscera would be sufficient Poison, for instance, is not always found in the stomach and primary organs of digestion*"—nor, I might have added, is poison the only or only the most frequent, resource of the murderer

3635 "It would probably be in the liver or the kidneys, would it not?—*It might be and it might not*"

3636. "You want the whole body, you think?[5]—*I mean that it may be necessary to examine other organs than those you indicate, Such ultimate organs and tissues, that is to say, as are capable of retaining the poisonous agent*"

3655 "You would not go so far as to require a post-mortem examination in every case?—*In the case of proper burial I would not require a post mortem examination In the case of every other method of disposing of the body I would absolutely require a post mortem examination and something more than a post mortem examination—a medico-legal post-mortem examination*"

3656 "You consider that would be absolutely necessary?—*Yes I say that every attempt to destroy a body without such an inquiry would, in my opinion, be a criminal act*"

3657 "Your opinion is, I think, that earth burial in the way we have referred to is also better from a sanitary point of view?—*Quite so In a sanitary point of view it is perfect*"

3658 "And does not in any way, you think, tend to spread infectious disease?—*Absolutely in no way whatever Any statement to the contrary is a statement which is not warranted by fact*"

CONCLUSIONS

The conclusions I have arrived at, therefore—many of them I may say, forced upon me—are as follows

1. That owing to the one sided statements put forth by the Cremation Society a very general impression has been created that there is only one kind of burial and only one remedy for it—cremation—a statement which is entirely misleading

2. That this belief has been greatly assisted by the systematic suppression on the part of an influential portion of the press of all effectual answers to the cremationists' statements and that in this way the country has become flooded with these unopposed fallacious statements

3 That the Government, as represented by the divided authority of the Home Office the Local Government Board and the London County Council, is equally to blame for allowing the abuses I have pointed out to go on and is therefore to that extent responsible for the cremationist agitation

4 That burial as at present carried out in coffins which prevent the resolution of the body is equally a reproach to the intelligence of the country and to the Government which permits and even prescribes such a practice.

5 That to make the practice of burial perfectly harmless and to do away with all excuse for cremation nothing more is necessary than to take the whole management of cemeteries out of the hands of the undertaker (and the speculator) and to make it a matter of State or municipal regulation.

6 That while the earth, properly used, is capable of disposing of any number of dead bodies, and of disposing of them insensibly and with advantage both to its own substance and to the air above it,[6] the practice of cremation, on a scale large enough to have even the slightest influence on burial either as a rite or as a custom, supposes the necessity not of one but of many furnaces, the use of which in or near towns no municipal authority would for a moment permit, and which, even in the open country, would cause such a consumption and carbonisation of pure air as to render (changes of wind considered) a large area in the neighbourhood of such vomitoria uninhabitable

7 That the cremationist statement, as reported in the *Times* that burial, however conducted, is "a propagator of infection and a cause of increase in the zymotic death rate," is not only untrue but abundantly disproved by expert evidence from all parts of the country

8 That there is no definite statistical evidence to show (*a*) that the general death rate, or (*b*) the zymotic death rate, or (*c*) the death rate from any group of diseases, or (*d*) the death rate from any single disease, zymotic or otherwise, has ever been affected by burial, even under the present objectionable conditions

9 That the further statement made in the *Times* as to the number of exhumations practised and of murders discovered by them is absurdly incorrect unless Palmer's six cases are counted as one, De Trouville's seven as one, Higgins and Flannigan's 10 as one, Cotton's 20 as one, Dr Brouardel's 445 as one, and so on

10 That the statement in "Modern Cremation" (pp 61, 62) which allows the reader to infer that, though "exceedingly rare in this country," it cannot be altogether denied that premature burial is *possible while "with cremation no such catastrophe could ever occur,'* is fairly disposed of by the following question put to six of our most distinguished physicians and surgeons and their answer to it

"As hospital physicians and surgeons of extended experience has it ever occurred to you to see a case of so-called suspended animation or trance which in your opinion could be mistaken for death, and do you think, the present state of our knowledge and resources considered, that the occurrence of such a case, or of such a mistake, can be regarded as possible?'

"In reply to this question we desire to say that no case of the kind it suggests ever presented itself to any of us and to express our confident belief that the dread of the possible occurrence of such a case is without support in the medical experience of this country, and further, that the signs of death are as certain after a few hours' suspension of the vital functions as they can be after many days

"It would, we feel, be a matter of regret and an indication of a low state of public intelligence if the groundless fears to which our attention has been directed by Mr Seymour Haden should hinder for a moment the adoption of an improvement in our social system the importance of which cannot be overrated

"GEORGE BURROWS, M D,
President of the Royal College of Physicians.
"WM FERGUSSON
"WILLIAM W GULL, M D
"WILLIAM JENNER
"JAMES PAGET
"THOMAS WATSON M D

"London, March 13th, 1875."

12 That the destruction, therefore, by cremation of all demonstrable evidence of the cause of death—of all such evidence, that is to say, as is only to be obtained by the exhumation of the body—is a danger to society and an arbitrary act on the part of an irresponsible body of persons which ought to be at once made the subject of competent investigation, and if its dangerous character is recognised to be declared illegal

13 It would seem, in fact that what is wanted is not a Bill to regulate cremation—which, on the contrary, as a measure of public safety ought rather to be at once declared a misdemeanour—but a Bill to regulate and ensure safe and proper burial, which Bill, to be effectual, should, besides dealing with the whole subject of cemeterial management, contain the following provisions (1) for burial within the earth as the only legal mode of disposing of a dead body, (2) for a limitation of time beyond which it should be illegal

[5] This question was put ironically I had said nothing about the whole body" and, this being so on being asked by Dr Cameron (3640) if "I would please give a single instance in which this had been done I refused to answer the question and referred him to Dr Stevenson, well knowing that he had in the case of Matilda Clover just found strychnia in the muscles.

[6] It is to be remembered in this connexion that as all things which have lived die and return to the earth, so the amount of decay which the earth is thus continuously and insensibly disposing of is exactly equal to the whole sum of life which is present upon its surface

knew there existed no ground whatever for any such statement, that by common consent typhoid fever owed its convection to overcrowding, filthy surroundings, squalor, starvation, and the actual contact of one poor unwashed, fever-stricken skin with another—in a word, to infection, or contagion, or both," and if I had seen at the time Dr Poore's Milroy Lectures I might have added of diphtheria "(1) that its bacillus had not as yet been recovered from the soil, (2) that out of 30 collected examples of soil from areas likely to be infected not a single bacillus typhosus had been found in one of them, (3) that according to Koch and Loesner it had, in fact, never yet been found outside the human body, and (4) that, so far from being found in the earth, 'virgin soil' so called was fatal to it"

All infectious diseases, I declared divide themselves into two great groups or classes—one which derives its origin from surface water as a carrier of the morbific agent the other from actual contact of one case with another in the open air Again the first of these classes is itself subdivisible into two distinct types of disease—one which depends on putrescent vegetable exhalations from marsh lands, and which includes within it all those forms of febrile disturbance known as malarial the other which like cholera and choleraic diarrhœa, depends on the actual introduction into the intestinal canal by means of surface water of the *dejecta* of patients affected with the same disease. Burial, therefore, four feet below the soil can have nothing whatever to do with any of those forms which constitute, as I have said, the first class of infectious disease. The second, and by far the larger class again, and which comprises small pox measles, whooping-cough typhus, scarlet fever, diphtheria, &c. owes its propagating power to the actual contact or close contiguity in the open air of one patient with another That class, therefore has no connexion with either soil or water and being wholly independent of even the surface of the earth can have even less to do with burial than the first class. To lump these two classes together therefore, as, to help cremation, is now being done is to begin with a scientific solecism of the most glaring kind, and seeing how perfectly well known the superficial method of their propagation is to suggest that they are spread when buried below the surface is a statement to all appearance in the nature of a direct appeal to popular ignorance and credulity The zymotic death-rate, in fact, has nothing whatever to do with burial, only two out of the seven diseases which comprise it having ever been shown to depend in any way whatever either on soil or water

THE "TIMES" AGAIN!

Meanwhile as if determined not to give up its unsupported statement of Dec 22nd, 1897, the *Times* on April 12th, 1898, printed a letter from Sir Henry Thompson which contained the following story —

THE STORY OF THE BURIED COW

"Pasteur's success in dealing with anthrax is known to all. Pasteur proved that the earthworms brought up the spores and not the bacilli themselves, which soon disappear from the buried corpse after the event. These spores long retain their vitality and unless the body is cremated or is buried in a large quantity of quicklime the disease will sooner or later appear when a favourable nidus presents itself Pasteur examined the *surface* mould at the spot where two years before a cow dead of anthrax had been buried at the depth of seven feet and observed germs which by inoculation produced anthrax in a guinea pig. This is an illustration and amply suffices here, as one among the various ways in which 'innumerable seeds of pestilence are sown broadcast through the land, a sentence characterised by my critical friend as inflated phraseology but it has at least the merit of being strictly true."

SIR SEYMOUR HADEN'S COMMENTARY ON THIS STORY

"Pasteur did not 'prove that earthworms brought up from a depth of seven feet the spores of anthrax; (1) because worms do not commonly burrow to such a depth and (2) because the buried bacilli of anthrax *do not live long enough in the earth to form spores.* The bacilli here referred to, like mosses, fungi, and other plants of low organisation require for their growth carbon and nitrogen water also and a certain temperature are necessary for the maintenance of their vitality Like plants, also, by the disintegration of organic combinations containing nitrogen they produce certain chemical products and as *fungi* assist fermentation. They vary too, as to the amount of atmospheric air they require, some of them, like the bacteria of *anthrax*, being unable to maintain their vitality without it and some being able to do with little (the so-called aerobic and anaerobic bacteria of Pasteur). Like other plants again, some are reproduced by spores or seeds. When by a linear arrangement of their primitive cells bacteria grow like rods they are called, as everyone knows, bacilli. Anthrax is a bacillus of this kind and being, like *bacillus septicus*, what is called aerobic dwindles and dies when deprived of air If therefore, the body of an *animal which has died of anthrax is buried entire*—that is, without being opened—the bacilli which characterise this form of disease with it, and notwithstanding statements to the contrary not only die with or very shortly after, it, but are incapable of reproduction in an active form. The infection of anthrax cannot in fact, as quantionists declare, be spread when so buried *When therefore it has been reproduced in fields in which cattle infected with the disease have grazed, died, and been buried the fresh outbreak is owing not to the buried carcass, but to the spores which have been left by the dejecta of the infected animals upon the surface of the field in question.* Both Klein and Koch are all agreed as to this and Koch in addition has proved by direct experiments[2] that the spores of anthrax are not, as Pasteur has stated taken up by earthworms and deposited on the surface by their castings and that the spores of anthrax bacilli, when mixed with earth in which worms are present, are not taken up by these creatures at all. Klein, indeed, carries these statements further and says: 'If bacilli grow in the depths of a fluid medium—in a medium that is, but scantily supplied with air—they do not form spores, and at length degenerate, and, as the fluid dries up, this degeneration goes on till finally nothing is left of them but their débris. Such bacilli, of course, are quite innocuous when introduced into the tissues of animals or into fresh nourishing media.'[3] Those, therefore, who have followed me in this statement—a statement examined, re-examined, and confirmed by the most eminent men to whom I have submitted it (and, as I have since understood admitted by Pasteur himself)—will see how little reliance can be placed on the reports spread broadcast through the land by the advocates of cremation that by the act of interment we shorten human life."[4]

CREMATION AN ENCOURAGEMENT TO CRIME

I now, and I trust for the last time, come to that part of the subject which no cremationist if he can help it is willing to hear mentioned, which the newspapers engaged in the cremationist propaganda are careful not to discuss, and which, whatever the momentary success which may attend (or appear to attend) the agitation of the question, will assuredly sooner or later provoke the repressive action of the law

On April 25th, 1893, in his evidence before a Select Committee of the House of Commons, nominally on "Death Certification," but really largely employed to advance the interests of cremation, Sir Henry Thompson made the following admission (Q. 1125, 1139)—namely that, *out of 393 bodies which he had up to that time burnt he had thought it prudent in "four or five cases" to take out and preserve the stomach kidney, spleen, and a portion of the liver* Why? He had previously told the committee that cremation, *as he practised it*, involved little or no risk, and the committee, as is proved by their report, had believed him Why, then, these precautions? Well might one of its members ask (1377–78), whether, if such an admission were "*known*" (*no*), it would not put an end to cremation altogether! I ask, Is it known? Have the votaries of cremation the least idea of any such proceeding as a condition precedent to a participation in its benefits? Is it duly set forth as such in the "Manual of Modern Cremation," which they are invited to depend upon as their guide? Has it occurred to them that in submitting the bodies of *their friends and relatives to be thus dealt with they have* one and all more or less identified themselves with these four or five suspected cases and that the day may come when, in the cause of justice, it may be necessary to obtain the names of those who thus figure as possible homicides? Why, again, confine these precautions to the detection of poisons, as if poison were the only weapon of the murderer? And *cui bono*, when, having burnt the body, a stab in the back or a knock on the head or a ligature round the neck is beyond the possibility of discovery? And, again, if in the early part of 1893 four or five suspicious cases out of 393 had already been burnt, how many more, may I ask, has it been considered prudent to put under lock and key since then when the number burnt amounts to 1283? Is it possible that any Government in its senses (on the report of a committee composed largely of *cremationists*) that with the special precautions taken by Sir Henry Thompson "there was little probability that cases of crime would escape detection, still, that inasmuch as such precautions were purely voluntary *they ought in the interests of public safety to be enforced by law*" Have they been enforced by law? Has the smallest notice been taken of this formal recommendation of the committee? None whatever The destruction of evidence still goes on That such a thing can be done with impunity by a self constituted private society would, if it were not a fact, be deemed incredible, and as such I respectfully bring it to the notice of the Home Secretary Not—having once embarked in so hazardous a business—that I blame the Cremation Society for taking adequate precautions against "accidents" But are they adequate? How can they be? That the Cremation Society has all along been *fully conscious of the risks it* was running is proved by its own offer to make a post-mortem examination of every body it burnt Why did it withdraw that offer and adopt instead of it the disembowelling process I have described? By what process of ratiocination is it now satisfied with a certificate (given, it may be, by the murderer, as in the case of Dr Cross and Mr Palmer) and "verified" by a stranger to the case who, being called in to see the body, has nothing to go by but what the possible murderer chooses to tell him? That such a certificate is not worth the paper it is written upon is certain and that it would be so regarded in a court of

[2] Mittheilungen aus dem Kaiserlichen Gesundheitsamte, 1881.

[3] Klein: Micro-organisms and Disease, chap. xi., pp. 155, 156 (Macmillan, 1886).

[4] Haden Congress of Hygiene and Demography, London, 1891

very mouthful we eat we are taking in enough of the ctive principle of disease to destroy a regiment, and that, notwithstanding, we not only escape infection but are perpetually diminishing the zymotic death rate, I find myself, with Dr Poore, obliged to accord a far greater value to this beneficent endowment of personal immunity than is commonly conceded to it

Woodcote Park, May 20th, 1899

An Address

ON

RADIOGRAPHY, WITH SPECIAL REFERENCE TO THE DETECTION OF RENAL CALCULI.

Delivered before the Oxford Medical Society on Friday, May 12th, 1899

BY C MANSELL MOULLIN, M.D OXON, F.R.C S ENG,

SURGEON AND LECTURER ON SURGERY AT THE LONDON HOSPITAL PRESIDENT OF THE ROENTGEN SOCIETY

GENTLEMEN,—The first thing which I wish to do is to express to you my cordial thanks for the honour which you have done me in inviting me to read a paper before the Oxford Medical Society on some of the problems of radiography It was with much pleasure that I accepted the invitation so kindly sent me by your secretary, not only because of my long standing connexion with Oxford, but because of the great interest which I take in radiography and in everything which can assist its advancement

I do not think that it is necessary for me to say anything here about the nature of the Roentgen rays or as to their mode of production. There are many things in connexion with them which are still obscure, but it appears now to be generally acknowledged that they are either exceedingly short or very irregular transverse ether waves and that they are produced by the bombardment of the antikathode by the highly charged molecules which form the cathode stream Other things being equal their brilliancy appears to depend upon the volume or the thickness of the spark and their penetration upon the force of the cathode stream—or in other words upon the hardness of the tube and the strength and the rate of interruption of the current Clearness and sharpness of outline are only to be obtained by keeping the focus from which the rays emanate as small and as steady as possible and for this purpose it is advisable that all rays coming from other parts of the tube, the products of what have been called parakathodic rays, should be cut off Putting aside for the present the therapeutic uses of the Roentgen rays, their importance so far as medicine and surgery are concerned is derived from the power which these ether waves possess of passing more or less thoroughly through the tissues of the body According to the conditions of the experiment nearly all the rays may pass through or nearly all the rays may be absorbed, so that the screen upon which they are received is either brilliantly lit up or is almost dark. Success in radiography, so far as its practical application is concerned, consists in proportioning the grade of the rays to the tissues which they have to traverse so as to produce the greatest amount of contrast They must, if possible, penetrate some of the tissues completely and others not at all

Nothing is more easy than to obtain a representation of a thin structure such as the hand The screen or the plate, whichever is used is close to the bones, so that there is no divergence of the rays after these have passed through and the outline is not blurred. The number of layers projected in shadow upon the same plane is comparatively small and the absorptive index of the tissues between the bones is quite different from that of the bones themselves The real problem is to obtain pictures of structures which lie at a considerable depth, of the vessels, the muscles, and the other soft tissues which form layers one over the other, and particularly of deeply buried foreign bodies, such as renal and biliary calculi, the absorptive index of which is not very different from that of the tissues which surround them In difficult cases such as these, in which it is often of the highest importance to obtain definite information, I believe it to be by far the best plan before attempting to take a photograph to make a thorough investigation with the screen Both methods, of course, should be employed so that no chance may be neglected, but I think that there can be very little question that in the hands of a skilled observer not only does the screen give much more varied and more accurate information than a photographic negative, but that the information which it gives enables a photographic negative to be taken afterwards with a much better chance of obtaining a good result than it otherwise would It is quite true that the screen does not give a permanent record, that with the screen there is no possibility of quietly and deliberately thinking the matter out and calculating the significance of each mark, and that the observer has to form an opinion at once upon a flickering shadow seen perhaps for an instant only, but in such a case it is quite possible that with a photographic plate the shadow would never be detected at all The intensity and penetrative power of the rays, especially when the apparatus is being worked at its highest pitch, are constantly varying With a screen it is possible for the observer to seize upon the moment when there is some slight difference in the degree of penetration and a shadow is thrown for an instant upon an otherwise bright field Contrasts may be detected in this way which only last for an inappreciable space of time, and often the most valuable information is obtained by watching these changes A photographic plate, on the other hand, records the sum of all the effects which have been produced since the beginning of the exposure It is quite possible, if the exposure is prolonged, for a sudden increase in the penetrative power of the rays to obliterate all that has been produced before I am convinced that when it is wished to obtain a photograph of one of these cases—and it is always advisable that both methods should be employed when there is any exceptional difficulty—no exposure should be made until it has been ascertained by means of the screen that the desired degree of penetration has been obtained and that the shorter the time of exposure and the greater the volume of light the better is the result likely to be As a matter of fact, I believe that the only successful photograph of a cholesterin calculus which has ever been taken (biliary calculi are even less absorptive than uric acid ones, and therefore more difficult) was obtained in this way—a very hard tube to ensure penetration of the whole thickness of the body, and a very short exposure in order that the contrasts might not be obliterated This photograph of a renal calculus which I am enabled to show you through the kindness of Mr Mackenzie Davidson illustrates the same thing It was taken in one minute The volume of light was enormous and the penetrative power of the rays was accurately proportioned to the structures which they had to traverse The relative merits of the screen and the photographic plate for clinical work are seen even more distinctly in the examination of the chest for such complaints as incipient phthisis The screen in the hands of a skilled observer whose eye is trained where to look and what to look for tells a great deal more than a photographic plate A negative result in the case of the latter is not worth anything as evidence It is another advantage in the case of the screen that the position of the light with regard to that of the object which is being investigated can be varied without spoiling the result Everything in the case of a photographic negative must, of course, be absolutely fixed By using a screen and altering from time to time the position of the focus tube—or, though not so well, that of the patient's body—the shadow of one object may be made to move through a certain range and alter its relation with regard to that thrown by others And in a few instances exceptionally favourable ones I admit, valuable information may be obtained as to the depth of objects from the surface. Such results must, of course, always be confirmed by means of photographs before operation is decided upon, but the screen will show whether any such result can be obtained, and if it can be obtained where the tube and the plate should be placed in each individual case

to keep a dead body unburied; and (3) for the illegality of strong coffins, brick graves and vaults, and of all contrivances having for their effect to retard resolution, and to confer on the dead a tenure, practically illimitable, of the soil which is necessary to the purpose of the living?

THE MILROY LECTURES.

The importance of these lectures as the first utterance of the kind in affirming by the aid of personal observation and collected facts the principles for which I have been contending for so many years, and as dissipating the fallacies which for too long a time have been allowed to possess the uneducated ear, is so considerable that I can do no less than accord them a distinguished place in the final record I am now making If in his evident desire to be judicially fair Dr Poore has somewhat attenuated the value of his own observations by giving undue prominence to those of others this cannot be chargeable upon him a fault It is enough for the purpose of this record that he tells us in correction of the speculations of Sir Charles Cameron of Dublin that the bacillus of diphtheria, like that of enteric fever, has never yet been found in the soil, that the discovery of hæmatozoa in the blood has opened to us a new view of malaria as something altogether different from a soil disease, that the plague bacillus has never been met with beneath the surface, that it is not in the earth but in the air that we must chiefly expect to find the morbific particle (whatever that may be) and in the surface water which is its readiest carrier to the soil, and it may be a little but only very little below it, that the *dejecta* of the patient and the germs of anthrax and of tetanus, though found to have attained a lodgement within the particles of the earthy mass, form no part of its substance and lose all their virulence when once there In a word, that the enteric fever referred to by Sir Charles Cameron, so far from having its *nidus* in the soil is, as I have stated, far more likely to have its origin in the actual contact, under conditions of filth and overcrowding, of one fever patient with another

AD TERRAM

For myself, however—and I am not sorry to have an opportunity of making the statement here—I am disposed, in the absolute belief which I have in the soil as the final correctant of every form of organic decay—and even of disease—accruing in the course of nature to its surface, to go farther than Dr Poore and invest it with supreme power as such universal correctant—as the chief factor in the great cosmical design, in short—for this great purpose Never, surely, was the cremationist farther at sea than when, in pursuance of his aims, he assumed the contrary and, with the aid of the *Times*, went out of his way to proclaim it *urbi et orbi* "By the act of interment we literally sow broadcast through the land innumerable seeds of pestilence which long retain their vitality, &c, destined at some future time to fructify in premature death or ruined health to thousands" Such is the statement which, in presence of a world's population which is ever increasing and an individual duration of life which is ever extending, the public is seriously invited to believe, as if—for it means nothing less—the earth and its inhabitants were thriving on disease!

I can, in fact, see nothing more probable than that as water in the shape of rain is largely concerned in cleansing and washing the germs of disease out of the air, so the earth as the natural filter of such water is the ultimate cleanser and disinfectant of both In a word, that its beneficent office in this respect is the very opposite of the malevolent office which is imputed to it by the advocate of cremation

Here, however, I find myself under the necessity of parting company (though only for a moment) even with Dr Poore, seeing that, though we arrive at the same conclusions, we get at them by the aid of materials which are not the same, and by means of a language which does not convey the same thing to the educated ear The point is an important one, because much of our misunderstanding of the power of the earth as a disinfectant has arisen out of it, and no small amount of capital hostile to its pretensions on this ore has been manufactured out of it In his ecture, for instance, Dr Poore expressly tells us that when he speaks of earth he means *humus*—that is, of the earth of his kitchen garden which is heavily laden with animal matter—while I have been making my experiments in the comparatively hungry soil of the park land which surrounds my house In other words, while he has been burying animal matter in animal matter I have been burying it in earth which nearly approaches the condition of what is called "virgin soil" The results obtained by us are consequently not the same My reason, however, for taking note of the difference is that while his proceeding represents "interment" in its worst form, mine represents it in its best, his in the form which I have especially condemned and which is in fact made the groundwork of the cremationist objection to burial, mine in the form in which burial ought to be, and might be, carried out if cemeteries were only properly managed

The language, again, which he employs, and which is that only too commonly used by the bacteriologist, is from my point of view objectionable because it encourages the popular belief that the body, even when properly buried, instead of re-entering the atmosphere insensibly and in every way inoffensively, is beset by a sort of nondescript border land saprophytic fauna whose office it is to devour it—a reading which the cremationist of course goes out of his way to encourage, and which is really materially helped by the use of such terms as "the living earth" to signify nitrification, and of such a word as "hatched" to signify the germination of the saprophyte, which, I take it, in common with Dr Poore, is at best an organism little higher than the lichen or the fungus Nor am I attaching too much importance to a carelessness of terminology which I believe began with Pasteur, because, while it imposes upon the popular ear, it is not without its effect even on our own—an effect which in fact, is demonstrable When Dr Poore, for instance, digs down into the humus in which he has buried a rabbit and finds it "full of earwigs" even he derives, *ipso facto*, a sort of warrant for his terminology, while I, digging into my own graves, which I do once a year to determine the progress of nitrification, and finding nothing of the kind, not unnaturally take exception to it. I have also another reason for objecting to it in the fact that 17 years ago, when bacteriological science was comparatively young, I wrote a letter to a late very distinguished friend on the subject which, though only half serious, will even now bear repetition

38, Hertford street, Mayfair
December 18th, 1882.

MY DEAR GULL,—I am glad to observe that what I have called the bacterial bugbear is beginning to moderate its pretensions as a general alarmist. Not that I disbelieve in 'germs and other entities equally occult and speculative, which by a pretty free use of Pasteur's term are being employed to shake our faith in the plan pursued by Nature for the resolution of dead matter since the world began All I say is that, without being in a position either to affirm or deny the existence of these aggressive germs and the harm they are said to do I should like to hear something of the friendly germs and the good they do If it should come to be proved which is possible, that the great operations of Nature destructive as well as constructive are carried on by germs all I can say is that I am prepared to think as highly of germs as I do of chemical action or of any other of those forces, physical or vital, by which Nature is pleased to work. I object however to their employment as missiles. I object to hear them spoken of as if they were creatures which prey upon us and to have them hurled at us as Nemesis for our misdeeds when really all we know about them is that the work they do is very like the work of ferments such as the yeast plant and other vegetable products of a similar character I will be bound to say that if at this moment we canvassed public belief upon the point we should find nine-tenths of it in terror of all microbes not as plants but as predacious animals the more formidable that they are invisible to all but the expert and that if we swallow them as perforce we must, it is in the hope that by doing so we sterilise them—which, in fact, in 999 cases out of 1000 I fully believe we do.—Yours,

F SEYMOUR HADEN

The reappearance of this letter in connexion with the Milroy Lectures reminds me, however, of another thing which has amounted to a profession of faith with me for many years and which I observe has not escaped the acumen of Dr Poore—the recognition, I mean, of the inherent power of the individual to resist, against the heaviest odds, the convection of disease—*a power evidently immeasurably greater than that either of the sui disant omnipresent microbe or of the artificial bacillus, however carefully it may be cultivated* I cannot but think, with every respect for the praiseworthy efforts of the bacteriologist to track the morbific particle to its lair, and master it there with its own weapons, that room still exists for a larger faith in those provisions of Nature for our individual protection than we are altogether willing to accord to them If it is really a fact that, with every drop we drink and

has the above I see without surprise an announcement in medical Journal of March 25th that at no distant period" by means of a limited liability company (!) it is proposed fully well equipped crematorium in the near neighbourhood up by t

had been sent to me with a suspected stone The symptoms and the character of his urine pointed strongly to the presence of a stone in the kidney and still more that it was in part at least composed of oxalate of lime But we were quite unable to get any evidence of it with a 12 in. coil. The tube was a specially hard one Only the day before, examining a thin, anæmic woman with the same object, the whole renal area had been brilliantly illuminated Yet after making full allowance, according to the ordinary calculation, for the increased distance between the tube and the plate and for the thickness of the patient, the result was of no value one way or the other The Wehnelt interrupter was not known then, but I think it is highly probable that if it had been we should have succeeded with it In a difficult case such as this every endeavour must be made to reduce the thickness of the tissues to be traversed as much as possible The patient's bowels must be thoroughly emptied by purgatives and enemata and no heavy meal should be taken for some hours, so that the stomach may be empty and its walls contain as little blood as possible I have thought in some of these cases of distending the stomach with gas It can easily be done by giving the patient successive doses of bicarbonate of soda and tartaric acid One of my colleagues, Dr Bertrand Dawson, has tried this with success in a case in which it was necessary to map out the outline of the enlarged stomach, and it seems to me that if it were employed in these cases it would materially help to lift up the liver and raise it from off the kidneys, especially upon the left side, but I have not yet had an opportunity of putting this into practice

The position of the patient is of great importance If he is sitting upright, the stone is but little influenced by the respiratory movements, and this is, of course, a great advantage, as it is impossible to obtain a definite shadow unless the object is fixed But if the abdomen is at all a full one the liver is crowded down on to the front of the kidney and the antero-posterior diameter of the body increased. I prefer the patient to be recumbent with the back well arched The light should be passed through in both directions, from before backwards, with the screen or plate behind and *vice versa* In this position the tension of the anterior abdominal wall is increased, the front of the abdomen is flattened as far as it can be, and the liver is lifted to some slight extent from off the kidney The influence of respiration upon the calculus may be counteracted by an ingenious device contrived by Mr Mackenzie Davidson The patient is directed to hold his breath for so long as he conveniently can, and the exact distension of the thorax is noted by means of suitably placed pointers Then he is allowed to breathe until he has recovered himself when he is directed to hold his breath a second time with the thorax in exactly the same state of distension This is repeated as often as necessary the light being only switched on during the period of apnœa when the thorax is at rest and the kidneys and the calculus are presumably occupying exactly the same position relatively to the light As the total exposure has been shortened by Mr Mackenzie Davidson down to one minute it is not so difficult for the patient as it might be supposed

With regard to biliary calculi I have very little to say They are even more difficult owing to their very low absorptive index As usually happens the difficulty is always greatest in those cases in which the information is most needed—when for instance, the calculus does not lie in the gall bladder but in the common or the hepatic duct and when the patient is stout and middle aged with a large and firm abdomen which resists pressure The best chance of success is to place the patient in the dorsal position with the back well arched and the focus tube beneath In this way the abdominal wall is made as thin and as tense as possible, the common bile-duct is brought much closer to the surface of the body and to the plate than would be imagined by those who have not tried operating in this position, the liver is lifted up to some extent, and the densest tissues—the muscles, &c, of the back, which have the greatest absorptive power—are nearest to the light The effect of this is to make the shadow which they cast more diffuse and uniform so that it merely produces the effect of a darkened background upon which the shadows thrown by the objects which lie nearer to the plate are less definitely outlined. But even with all these precautions and with the best of apparatus I do not think that there has been more than one successful case

WOUND OF THE RIGHT URETER DURING OVARIOTOMY, SUTURE, FISTULA, RECOVERY

By R LAWFORD KNAGGS, M C CANTAB., F R C S ENG,

ASSISTANT SURGEON TO THE LEEDS GENERAL INFIRMARY.

WOUNDS of the ureters are with few exceptions the accidental consequence of surgical interference for other conditions and they add a serious complication to procedures which are sufficiently formidable without them. They are liable to occur in three groups of operations—viz., (1) abdominal operations for certain pelvic tumours often opening up the broad ligaments and usually far from simple to remove, (2) vaginal or sacral hysterectomy for cancer, and (3) Kraske's operation for malignant disease of the rectum. The cases tabulated in this paper are drawn from the first and second groups, in which a possibility of injuring a ureter is always before the operator's mind, but though no case of repair of a ureter after a Kraske's excision of the rectum is recorded, the third group is introduced here because I have seen post mortem an instance of complete division of one ureter in this operation which apparently had escaped detection and had led to the fatal peritonitis The following case belongs to the first group

CASE 1 —A woman, aged 35 years, came under my care in Dr Braithwaite's absence, and on May 21st, 1898, I removed a multilocular ovarian cyst containing a large calcareous mass from the right side and a proliferating papillomatous cyst of the ovary from the left. The right tumour, for which the operation was undertaken, was bigger than a large cocoa nut and expanded the broad ligament. Three-quarters of its surface had to be enucleated from between the layers of the latter and from the floor of the pelvis to which it was densely adherent Whilst separating and dividing the numerous bands of fibrous tissues passing from the pelvic fascia to the tumour one rather larger than the rest was included between a couple of ligatures preparatory to division On account of its size this was done cautiously and at the first cut with the scissors it was evident that the right ureter had been partially divided The ligatures were left *in situ* and the distal extremity of the ureter was carefully separated from the tumour. The pedicle of the latter was finally isolated, ligatured, and divided, and the tumour removed, and the left ovary being found to be the subject of a ruptured proliferating papillomatous cyst, the whole of that appendage was also taken away There was a good deal of bleeding from the space from which the right tumour had been enucleated and this was packed with sponges whilst the injured ureter was being repaired The ligatures were first removed The gap in the ureter, which was not dilated, included quite half the circumference Its edges were first drawn together by four interrupted fine silk sutures (in the absence of sufficiently fine catgut) transfixing all the coats, the ureteral walls being so thin that to exclude the mucous coat and yet get a firm hold seemed practically impossible. Then four Lembert sutures, also of fine silk, were applied, and, lastly, the soft connective tissue which was attached to the ureter above and below the wound was brought together by one or two more sutures The ureter was then placed on the floor of the pelvis and the operation concluded A Keith's drainage-tube was placed in Douglas's pouch and iodoform gauze was packed down into the raw cavity over the injured portion of the ureter and brought out alongside the glass tube The wound was then closed in layers. The patient passed safely through a period of unusually severe shock and the wound continued to be packed with gauze On June 15th the escape of pus from the wound and the discovery of a tender swelling on bimanual examination to the right of and above the cervix uteri pointed to an abscess forming in connexion with the ureteral injury A rubber tube was now substituted for the gauze and this led down in the direction of the swelling The abscess apparently continued to refill and discharge itself at intervals till July 10th when a suspicion arose that urine was mixed with the pus from the abdominal opening A week later there was no doubt, and about July 24th, coinciding with the disappearance of a severe pain in the

This is not of so much value for renal calculi, as the distance of the stone in the pelvis of the kidney from the last rib or the transverse process of one of the lumbar vertebræ is not sufficiently great to make much difference, but it is of great importance in the case of such an injury as a narrow fissured fracture Even when the bone is a superficial one this may easily be missed if a screen is not used Unless the antikathode is exactly over the fissure the shadow of the bone as thrown upon a photographic plate may appear to be perfectly normal With a screen and the power of altering the relative position of the light and the object the fissure is shown at once

I am not prepared to say that the advantage of the screen over the plate will be permanent Radiography is so young yet, and improvements in its methods are so numerous and so sudden, that the conditions may be entirely reversed in the course of a month or two We may in a little while be able to take a series of negatives, one after the other at the same sitting, with rays of different penetrative power and with different times of exposure, and then by combining and studying the results together we may be able to obtain information which shall be more exact and definite than that which we now obtain with the screen It seems probable from many things that the next great improvement will be in the sensitiveness of our photographic films At present they allow a very large proportion of the rays, probably 90 per cent, to pass through without producing any effect, and although this can be obviated to a certain extent by placing a screen upon either side of the plate during exposure it is done at the cost of the appearance of the print, the details in which are seriously obscured by the granular effect which is produced even with the finest screen

Whether an induction coil or a static machine gives the best result in cases of suspected renal calculus depends upon so many considerations that it is impossible to make any definite statement one way or the other In working with different observers I have been greatly struck with what I can only call the individuality of the apparatus employed and the way in which it responds to a particular method of treatment A tube, for instance, which has been working well upon a coil seldom gives so good a result at once with an influence machine, and *vice versâ* The cause is in all probability merely a question of adjustment but it makes any attempt at comparison very difficult Then each man seems to work his apparatus in his own way This is especially the case with the tubes One man warms the anode, another heats the cathode, a third connects the tube in some special way Each man prefers his own method and I believe succeeds best with it

Local considerations are sometimes of importance In Cuba, for instance, owing to the moistness of the atmosphere, it is said that the Americans found their influence machines almost unworkable On the other hand, in the Soudan where the air is intensely dry, Major Battersby, R.A M C, preferred a coil, owing to its greater portability, supplying the motor power which was required for his dynamos by an ingenious arrangement of soldiers and bicycles But if vulcanite can stand the climate, of which I am not sure, it is a question whether some modification of the influence machine, such as Bonetti's, composed of two concentric ebonite cylinders, 50 centimetres high and 50 centimetres in diameter, giving a spark length of 30 centimetres, would not have answered equally well and have been more convenient The great drawback seems to be that the surface of ebonite plates so soon becomes oxidised, and though it can be renewed by sand papering and re varnishing proceedings of this kind are not always practicable

The power of dispensing with all forms of batteries and accumulators is a great advantage on the side of the influence machine Anything can drive an influence machine, it is always ready and it does not get out of order so easily as does a coil Mr Wimshurst tells me that he has had one in constant work for 12 years without its failing in any way There is no risk of destroying the insulation With plates of sufficient surface it can be made to give a stream of ample volume and the strength of the current, is practically uniform Moreover, there is good evidence to show that influence machines are much less liable to cause injuries than are induction coils This is, perhaps, not of so much consequence now that hard tubes and short exposures are employed The so-called Roentgen ray burns, which are not due to the Roentgen rays at all but to the electric discharge from the surface of the tube and the electrodes, were caused by the prolonged exposure which was necessary when soft tubes were used Now such an accident is so rare that although the Roentgen Society sent round a circular to all its members asking for particulars of such cases they received only five replies, and none of these related to cases of recent date Still the fact for what it is worth tells in favour of the static machine In another way no doubt it is safer The current from an influence machine is quite harmless supposing by any chance the patient happens to get into the circuit I have heard of this happening in the case of a 24-plate Wimshurst machine One electrode became detached and fell upon the patient's abdomen, which was exposed beneath, without causing him the smallest discomfort Just as with Tesla's high frequency apparatus it is quite possible, standing upon a glass plate, to light up a tube by holding it in the hand while forming part of the circuit An experience of this kind would be very unpleasant if a coil were being used

Surprises, however, as I have mentioned already, are so common and so sudden in radiography that positive statements as to the relative merits of coils and influence machines when difficult cases such as renal calculi are in question can never be of more than temporary value Within the last few weeks an adaptation of a principle which has, I believe, been known for years and which has been made use of for welding steel—the Wehnelt electrolytic break—has effected what appears to be a complete revolution It has increased the power of the coil and the steadiness and volume of the stream to such an extent that it is an open question whether the advantage now is not on the other side In its essentials the construction of the Wehnelt break is exceedingly simple It merely consists of a platinum and of a lead electrode—this latter of considerable size—immersed in dilute sulphuric acid It is placed in the primary current with the platinum attached to the positive pole No condenser is required The immediate effect is the formation of a brilliant intermittent arc, apparently between the platinum and the acid The interruption, which appears to be constant for the same strength of acid and the same distance, takes place many hundred times a second The spark length of the coil is not so great as with a mercury or a platinum break, but the volume is enormously increased and the light obtained is much more brilliant and is perfectly steady The hardest tubes, those which have a bluish tinge when lighted up and which are unworkable with a platinum or a mercury break, give a magnificent light of immense penetrating power with it So far it has only been worked with a constant current of high voltage, requiring therefore rather large accumulators, but recently it has been adapted to the alternating supply as well Whether it will work permanently remains to be seen It seems to get tired after a time, but generally speaking when this occurs it can be made to start again either by mechanical means or by increasing the strength of the current There can be little doubt that this is one of the most important advances in practical radiography

The condition of the patient and the composition of the stone in cases of suspected renal calculus require special consideration If the patient is thin and anæmic, with poor muscular development, and if the calculus is composed of oxalate of lime positive evidence can usually be obtained In some instances in which it was doubtful whether the symptoms were due to tuberculous pyelitis or to calculus the point has been definitely settled at once Tuberculous deposits in the kidney are never sufficiently opaque to throw a definitely limited shadow like that of a calculus In others in which the symptoms have pointed first to one side and then to the other calculi have been proved to be present in both kidneys, and in others again it has been shown that in addition to the main calculus there were other smaller ones buried in the substance of the kidney which would very probably have been overlooked in an operation Phosphatic calculi are harder to detect and calculi of uric acid or of urates harder still, in fact, the absorptive capacity of a uric acid calculus is scarcely greater than that of the highly vascular kidney which surrounds it. When the patient is stoutly built, and especially when he is muscular as well as stout, success is much more rare The tissues corresponding to the larger proportion of hæmoglobin they contain, are more opaque The calculus is farther from the screen or plate so that its shadow is less well defined, and the distance from light to plate is much greater On one occasion Mr Mackenzie Davidson and I in spite of every endeavour failed to get a satisfactory result The patient was a strongly built and rather stout man who

TABLE I —WOUNDS OF THE URETER—URETERO URETERAL ANASTOMOSIS

Complete Division

Date.	Name	Method.	Drainage &c.	Results.
1886	Schopf Bovee's paper Annals of Surgery 1897 vol. xxv., p. 67	End to-end eight silk sutures	Abdomen closed.	Death in seven weeks from tuberculosis Pelvis of kidney distended ureter embedded in cicatricial tissue
	Tauffer: Bovee's paper *vide supra.*	End to-end from six to eight sutures over No 8 catheter which was removed	Drainage glass tube and vaginal.	—
	Tauffer: Bovee's paper	Do	—	—
	Fritsch Bovee's paper	End to-end fine intestinal suture.	—	—
1890	Hochenegg Bovee's paper	End to-end	—	Sacral operation hysterectomy for cancer Death on the twentieth day from hæmorrhage. Ureter suture intact.
1893	H. H Kelly Annals of Surgery 1894 vol. xix. p. 70	Van Hook's lateral implantation oblique section of the upper end to avoid contraction of its orifice. Van Hook's paper March 4th, 1893. Kelly's operation May 1st 1893.	Gauze drain no leakage	In good health three years after Kelly's Operative Gynæcology, vol. I., p. 466.
1895 (published)	B. W Cushing Abstract, Annals of Surgery 1894 vol. xix. p. 757	End-to-end sewn together with two silk sutures, one catgut.	Gauze and glass tube drainage	Fistula developed from the fourth day and closed in nine months. Perfect in result five years later Bovee: Annals of Surgery 1897 vol. xxvi., p. 317
1894	B. Emmett: American Journal of Obstetrics April 1895, vol. xxxi. p. 449.	Van Hook's modification to get dilated upper end into lower	No drainage catheter in bladder six days.	—
	Doherty (Bovée's paper) quoted from Van Hook.	Van Hook's.	—	—
1896 (published)	Mayo Robson Bovee's paper	End-in-end two inches of ureter removed in operation	—	Well six months later
1896	Wesley Bovee Annals of Surgery 1897, vol. xxv p. 61	Oblique end to-end one inch shortening	No drainage catheter every six hours.	Well 11 months later Bovee Annals of Surgery vol xxvi. p. 317
1897	R. Winslow Annals of Surgery January 1898 vol xxvii. p. 46.	End-in-end two traction sutures used.	—	—

Partial Division

1888	Pawlik Bovée's paper	Double row (Lembert) of silk sutures over ureteral catheter which was left in covering of peritoneum.	Half divided	Death in 14 hours from shock. Ureter satisfactory No leakage.
1895 (published)	Westermark Annals of Surgery 1896, vol. xxiii. p. 339	Direct suture.	—	Sacral hysterectomy Primary union of ureter
1897	H. Morris Hunterian Lectures, Brit. Med. Jour 1898 vol. i p 878.	Fine silk sutures à la Lembert peritoneal covering	Three parts divided.	Death in 51 hours Union secure at post mortem examination
1898 (published)	Hindley Quoted by Winslow Annals of Surgery Jan. 1898, vol. xxvii. p. 48.	Sutured	—	Two weeks later a urinous infiltration into the broad ligament was opened from the vagina and drained.
1898	Lawford Knaggs.	Sutured Lembert.	Half divided gauze and glass tube drainage.	Urinary fistula formed seven weeks after operation closed quickly Well 11½ months after

All the patients recovered except those in whose cases an opposite result is stated. The initial operation was for an abdominal tumour in every instance, except where a sacral operation is mentioned as having been performed.

and five by other routes Seven of them (four abdominal and three various) have been performed at once for injury during operations for disease Three have been done for ureteral fistula resulting from a previous operation and two for incontinence arising from an accessory ureter The procedures which have been employed vary, but they may be classified into three groups 1 The method used by Paoli and Busachi in their successful experiments upon dogs consisted in splitting the end of the ureter and suturing it to the incision in the bladder This corresponds to the end to-end method in uretero-ureteral anastomosis 2. Implantation of the end of the ureter through a small opening into the bladder and fixing it there in a variety of ways Van Hook's traction sutures have been used several times and where details are given it would seem that careful suturing in the vicinity of the wound was a frequent accompaniment 3 Extra peritoneal implantation as performed by Witzel (*vide* Table II) not only introduces a completely new feature but also a novel method of implantation by which the ureter is made to take an oblique course through muscular bladder tissue According to Budinger, by this plan leakage is prevented because with distension of the bladder the channel of the ureter must become obliterated, and stricture at the point of entry, which frequently takes place from the number of sutures usually employed, is avoided.[3]

[3] Annals of Surgery, Abstract, vol. xxi., p. 223.

It is of interest to notice that in the abdominal operations Paoli and Busachi's method, which was the first to be employed, gave way to implantation which was performed in the last six of the series of seven Moreover, no leakage took place in any of the cases of implantation, but in the case in which Paoli and Busachi's method was used it did In the second group of cases the details are not sufficiently clear to justify an attempt at classification Nor is it possible to make any positive statement with regard to the question of subsequent stenosis and consequent hydronephrosis, but the very absence of information is not without its value All the recorded cases have been successful, but it is clear that the operation of choice is implantation, which can be carried out so satisfactorily as to render drainage of the abdominal wound unnecessary It has been pointed out that after implantation there is nothing to prevent regurgitation of urine along the ureter, but this need not trouble us till it is shown to be a danger, for it is quite possible that the peristaltic power of the tube may arrange itself to meet the difficulty and when the bladder contracts the muscular action will close the orifice of the canal and prevent it

THE AMOUNT OF SHORTENING

Under the complicated conditions which in many cases have led up to the necessity for repair of a ureter it has happened occasionally that a certain amount of the tube has been sacrificed (in Robson's case two inches and in Bovée's

right iliac region, with a fresh discharge of pus and a fall of temperature to normal, an unmistakeable urinary fistula developed The quantities of urine passed each day through the bladder from July 24th to 31st inclusive were as follows—viz 12 ounces, 10 ounces, 11 ounces, 13 ounces, eight ounces, 12 ounces, 10 ounces, and six ounces, and that passed from the fistula into the dressings was estimated on July 30th and 31st as 10½ ounces and 21½ ounces respectively On August 1st the large drainage tube which had been used was changed for one of smaller calibre but of equal length This was immediately followed by a marked diminution in the escape of urine by the fistula and a large increase in that passed by the bladder (on July 31st it was six ounces, on August 1st and subsequent days it was 38 ounces, 44 ounces, 48 ounces, 40 ounces, 42 ounces, and 44 ounces) By August 6th the urinary fistula had closed and a pill of methyl blue, whilst staining the bladder urine, produced no effect on the discharge from the abdominal wound, in striking contrast to what had taken place on July 31st when the same test had been applied From this date the fistula remained closed, the tube was gradually removed, and on Oct 1st the patient was well and in good condition There was no abdominal induration and the right kidney could not be distinguished. The patient was seen on May 5th, 1899—nearly a year after the operation She was quite well and following her usual occupations and the right kidney could not be felt Though she was somewhat stout there would have been no difficulty in detecting it had it formed a swelling of only moderate proportions

The point of special interest in this case is the long period —seven weeks—which elapsed between the operation and the development of the urinary fistula No doubt the abscess was due to slight leakage, but from the remarkable effect produced by the change of tube the inference is natural that the fistulous opening was made larger and practically all the urine from the right kidney directed through it by the pressure produced by the tube upon the ureter below The rapid closure of the fistula and the immediate large increase in the urine passed through the bladder when that pressure was removed show that two months after the operation no stenosis could have resulted from the inflammatory tissue which had been formed—at least, in that part of the ureter below the wound Quite possibly, too, the fistulous opening may have been promoted by the gauze packing and the injury to the deposits of lymph which its removal may have caused, but at the time of the operation the union seemed so likely to permit leakage of such a fluid as urine that it was not considered safe to trust it without safeguarding it by a drain, especially as it was impossible to surround it with a peritoneal covering

A review of the work done in connexion with ureteral wounds cannot fail to notice how nearly all of it has been carried out in America or in foreign countries and how little Britain has contributed to it The subject is one which has been largely elucidated by the help of experiments and this to some extent no doubt explains why so little attention has been paid to it in this country and why so small a quantity of English literature is devoted to it It will be seen from the subjoined lists of published cases that there have been 12 cases of complete and five of partial division of a ureter where restoration of the duct has been carried out (uretero ureteral anastomosis) and seven other cases of complete section in which the upper end of the severed ureter was grafted into the bladder All these injuries occurred in the course of serious operations and were dealt with during their progress, but in the remaining five cases in Table II bladder implantation was performed as a secondary operation for fistula in some, or as a primary measure for relief of a congenital defect in others Of all these cases only four died and in every instance the result was quite independent of the ureteral injury From this it might be imagined that a wound of a ureter is a trivial affair, but inasmuch as injury of these ducts is no [illegible] takes place in operations of great severity, in which tissue is not improbable even without this of sufficient surface [illegible] practically certain that the lists are not volume and the st[illegible]ssible that in some of the unpublished uniform Moreover, the [illegible]ternal wound, notwithstanding the influence machines are [illegible] have directly contributed to the than are induction coils [illegible] consequence now that [illegible] dealing with injuries to the ureters employed The so-called [illegible] of surgical operations the reunion of due to the Roentgen rays [illegible] uretero-ureteral anastomosis (*vide* from the surface of the tu[illegible] —and transplantation of the upper by the prolonged exposure [illegible] he two methods which aim at a permanent remedy Grafting upon the skin or into the vagina should be looked upon as merely temporary expedients and nephrectomy as a final resort only to be adopted under certain serious and exceptional conditions Of the plans which have at different times been suggested ligation of the ureter deserves some notice, and implantation into the bowel should not be passed over lest it should escape condemnation (*vide* Table III) Lastly, diagnostic ureterotomy, as introduced by Kelly, is so intimately connected with the subject that it may fairly be included within the scope of this article

UNION OF THE DIVIDED ENDS OR URETERO URETERAL ANASTOMOSIS

This operation has been carried out in three essentially different ways

1 *The end to-end method* consists in the approximation by suture of the transversely or obliquely (Bovée) divided ends, the mucous coat not being pierced It was employed in the earlier cases of the series Though the results were apparently satisfactory it seems to have given place to the two following operations which are more easy of performance and probably less likely to be followed by leakage

2 *The lateral implantation method of Van Hook* —This is easy to understand from a diagram but rather complicated to describe (*a*) The cut end of the vesical segment is ligatured, (*b*) a quarter of an inch below the ligature a longitudinal opening is made into the ureter twice its diameter in length, (*c*) the open end of the upper segment is split longitudinally to prevent cicatricial contraction, (*d*) two fine sewing needles threaded at opposite ends of a piece of catgut transfix from without inwards the lower extremity of the upper segment opposite the split ("traction suture"), (*e*) the needles are then passed through the longitudinal incision in the lower segment and made to transfix the ureteral wall from within outwards a little distance below, (*f*) the upper end is now drawn by this suture through the opening in the lower segment and fixed by tying the ends of the traction suture (the anastomosis may be strengthened by a few additional sutures), and (*g*) finally, the union is enclosed or covered by folds of peritoneum or by a detached omental graft Blood good has figured a specimen resulting from an experiment showing that after this operation the mucous lining becomes continuous and no constriction of the canal results [1] It would also appear that no leakage takes place and that the abdomen may be closed without drainage [2]

3 *In the end in end method* the upper extremity is invaginated into the lower end, which is split longitudinally for half an inch to permit it The union is then made firm by sutures This method was introduced by Poggi of Bologna in experiments on dogs, and Mayo Robson, who at the time was not aware of Poggi's work, first employed it in the human subject Van Hook's method has been used three times and the end in end twice and all have been equally successful

Of the five cases of partial division all have been treated by direct suture Of these, two died from the effects of the severe operation they had undergone, but in two of the remaining three leakage took place, a point which rather tells against the end to-end method for complete division Should subsequent cases show no better results from direct suture in partial transverse wounds it would be better to complete the section and restore the tube by Van Hook's or the end in-end method. There is only one definite piece of evidence of the eventual effect of these operations upon the kidney In Schopf's case at the end of five weeks the kidney was found to be hydronephotic and the seat of union embedded in cicatricial tissue There is, however, sufficient presumptive evidence in favour of the belief that stenosis does not occur frequently from the long periods which have elapsed after the operation in which the patients have been known to be in good health (Kelly's three years, Cushing's five years, Robson's six months, Bovée's 11 months, and my own case almost a year)

IMPLANTATION INTO THE BLADDER

Of this operation I have been able to find published records of seven cases performed by abdominal operation

[1] Annals of Surgery 1894 vol. xix. p. 70

[2] For diagrams illustrating Van Hook's method and Bovée's oblique end to-end method vide H Morris's Hunterian Lectures Brit. Med. Jour April 2nd 1898, p. 873. I am considerably indebted to those lectures and especially for the description of Van Hook's operation

implantation, pulled the bladder up and attached it on the right side These proceedings answered the requirements in each case The experiments which have been performed with this object are of interest

1 Monari (*a*) has fastened both ends of the ureter into the external wound under considerable tension, a month later the portions had so stretched as to permit of anastomosis, and (*b*) in another experiment he anastomosed a ureter divided near the bladder with that of the opposite side. Though the experiment was considered a success, when the animal was killed four months after operation yet the ureter had been compressed at the hole which had been bored in the mesentery for its passage [4] This is hardly likely to be of practical utility, nor what surgeon would care to tamper with the sound ureter in such cases?

2. Wesley Bovée has tried to meet a deficiency of three or more inches by bringing down the kidney and fixing it at the level of the iliac crest From two experiments on dogs he concludes that the operation is a practical one [5]

3 Rydygier has proposed to implant both ends on the abdominal wall and fashion a connecting channel from skin between them It hardly needs the observation of Emmett that "either the distal end atrophies and becomes useless or it is found that no tissue that can be utilised to connect the two can serve as a carrier of urine," to make us look askance at such a plan [6]

the upper end and the bladder is too great to allow a ureterocystotomy to be considered Where, on the other hand the ureter is cut near enough to the bladder to allow the upper end to be turned into the bladder it will be found that the lower end is so short and awkwardly placed that a ureteroureteral anastomosis is not to be thought of There is but one class of case in which the procedure is elective, that is when the ureter has become lengthened and dilated by displacement upwards over a uterine myoma I would in this case elect to do a uretero-ureteral anastomosis if the ureter were dilated or a uretero-cystotomy if it were of normal calibre."[9]

Grafting on to the skin or into the vagina are to be regarded as temporary or palliative procedures Either may have to be adopted when the patient's condition necessitates rapid conclusion of the operation or where insuperable difficulties prevent approximation of the two ends The vaginal fistula in the future will in most instances be most easily and satisfactorily dealt with by an abdominal uretero-cystotomy and it is quite possible that the inconveniences and dangers of one opening upon the skin may be surmounted upon the lines already described or suggested without the sacrifice of the kidney Indeed, nephrectomy, formerly not infrequently performed for ureteral fistula, will in the future only be admissible in very exceptional cases, or when septic infection of a single kidney has resulted from a ureteral fistula, or a

TABLE III —CASES OF IMPLANTATION OF THE URETER INTO THE BOWEL.

Date.	Name.	Method, &c.	Result.	Why performed.
1862 (?)	Simon: Surgical Treatment of Children's Diseases, Holmes, p. 147.	Loop of thread, passed in an ingenious manner made to ulcerate through contiguous portions of ureter and rectum. Communication resulted. Urine escaped by the skin although the fistula remained patent.	Death one year after operation. Suppurating pyelitis on both sides	For exstrophy of the bladder
1878.	T. Smith St. Bartholomew's Hospital Reports, 1878, vol. xv p. 29.	Each ureter inserted into the back of the colon on the corresponding side. Operation on the second ureter 17 months after operation on the first fatal in 27 hours.	Necropsy —Left kidney hydronephrosis from stenosis—a probe passed along the ureter would not enter the bowel. Right kidney obstruction to the passage of urine at junction with bowel. Kidney showed chronic changes.	For exstrophy of the bladder
—	Kuster Annals of Surgery 1894, vol. xx., p. 193.	Both ureters into the rectum.	Death purulent peritonitis sutures did not hold renal infection.	Cystectomy for cancer
1892, September	Chaput Annals of Surgery 1894 vol. xx., p. 193.	Ureter dilated junction made with posterior surface of the colon on the left side.	Successful drain in posterior peritoneal space. 12 months after there was no sign of infection.	For uretero-vaginal fistula left after operation for vaginal hysterectomy
1892, November	Chaput Annals of Surgery 1894 vol. xx. p 193.	The first ureter was successfully implanted the second ureter was implanted three months later	Death occurred the same day There was no necropsy The patient became comatose there was suppression of urine, the watery motions ceasing.	For tuberculous cystitis and vesical fistula following operation.

5 Lastly, Van Hook suggested the creation of a diverticulum from the bladder which should be placed in the abdominal wall and be long enough to meet the upper end of the ureter Witzel's operation was of this nature

PRACTICAL POINTS AND THE CHOICE OF OPERATION

There are some practical points in connexion with these operations which deserve special mention 1. Van Hook pointed out the great elasticity of the ureters which permitted them to be stretched or dilated to a considerable extent There is no need to emphasise the importance of this fact 2. Oblique section of a ureter so as to give a larger sectional area and diminish the liability to stenosis may be adopted under many different conditions In implantation the grafted end is split for the same reason. 3 Lastly, in bladder implantation the extremity of the vesical portion of the ureter should be tied, as leakage of urine from the bladder has been known to take place from it.[8]

As operations uretero-ureteral anastomosis and implantation into the bladder have each their proper sphere Kelly puts the matter concisely in this way "When the ureter is cut far enough back from the bladder to permit an anastomosis of the upper into the lower end the distance between

ureteral operation and even then possibly after less radical measures have failed to relieve

Implantation into bowel—Great hopes were entertained at one time that the difficulties of treating divided ureters would be settled in this way Many names are associated with the experimental surgery of implantation of the ureters into intestine, but it must be admitted that the results have been disastrous As evidence of this it will be sufficient to quote the experience of Harvey Reed Of six bilateral implantations in animals all died, the causes of death being acute peritonitis, nephritis with some obstruction, and hydronephrosis. Of three unilateral operations one told nothing as the post-mortem examination was spoilt, one had nephritis and hydronephrosis when killed, and one was satisfactory when killed on the twenty-fifth day [10] Nor are the results of the operation in the human being more satisfactory, as will be seen by a study of the accompanying table (Table III) of all the published cases in which this method has been adopted for any cause whatever The frequency with which failure resulted from septic infection of the kidney both in the experiments and in the cases is only what our present knowledge would lead us to expect, but in addition to this, constriction was often found to result at the seat of the implantation. An improved operative technique might have overcome the latter difficulty, but the inability to avoid kidney infection has prevented grafting into the

[4] Ibid., vol. xxv., p. 379.
[5] Ibid. 1897 vol. xxvi., p. 312.
[6] Penger's paper ibid., 1894 vol. xx., p. 257
[7] Ibid.
[8] Mollinaky and Pozzi report cases Bovée's paper Annals of Surgery vol. xxv., p. 73.

[9] Operative Gynæcology, vol. i., p. 459
[10] Annals of Surgery 1892, vol. [illegible]

one inch) or that a certain portion has been rendered useless for operative purposes from being embedded in cicatricial tissue Though the ureter is capable of considerable stretching and Robson found no difficulty in invaginating the upper into the lower end in his case because the tube was so dilated and elongated, yet there have been occasions, chiefly in cases of implantation into the bladder, in which the strain has made it necessary to adopt measures to avoid it And the possibility of having to meet a serious deficiency in length has led to a variety of experiments to test the feasibility of the ideas suggested for overcoming it. The following plans have been tried in the human being (1) Kelly cut away the bladder from its attachment in front and at the sides so that it lay loose on the pelvic floor, (2) Baldy fixed the bladder by suture to the pelvic wall, close to the stump of the ovarian artery, and (3) Witzel, in his extra peritoneal

TABLE II —CASES OF IMPLANTATION OF THE URETER INTO THE BLADDER

Abdominal Operations

Date.	Name	Method.	Result.	Drainage, &c.	Condition for which the initial operation was undertaken.
1893 (published)	Novaro, quoted by Fenger Annals of Surgery, 1894, vol xx., p 257	Paoli and Busachi's. Distal end of ureter split and united by suture to incision in the bladder	R.	Gauze drain, leakage of urine for several days.	Uretero-vaginal fistula following hysterectomy for carcinoma.
1894	H. A. Kelly Kelly's Operative Gynæcology, vol. i p. 461, and Johns Hopkins Hospital Bulletin February 1895.	End of ureter split drawn through small incision in the bladder (4 mm) by forceps passed through the urethra, across the bladder and through the incision. Six interrupted sutures fastened the muscular tissue of the bladder to the outer coats of the ureter The bladder was cut away from its attachments in the front and sides to enable approximation to be made.	R.	Gauze drain no leakage	Uretero-vaginal fistula resulting from vaginal hysterectomy for carcinoma.
1894 (published)	Krug American Gynæcological and Obstetrical Journal, November 1894 Abstract, Annals of Surgery, 1895, vol. xxi, p. 224	Distal end of the ureter split and inserted by traction sutures as in Van Hook's method of uretero-ureterostomy, careful closure of the bladder	R.	Abdominal wound closed; catheter in bladder four days cystoscope has since proved patency of implanted ureter	Intra ligamentous uterine fibroid hysterectomy
1894 (published)	C B. Penrose: Annals of Surgery 1894 vol.xix., p. 696.	Distal end implanted through an incision half an inch long by means of Van Hook's traction sutures (two) Peritoneum covering ureter was drawn down and sutured to the peritoneum over the bladder	R	No drainage catheter in bladder three days.	Carcinoma uteri involving the left ureter; one inch excised; abdominal hysterectomy
1896 (published)	J M. Baldy: American Journal of Obstetrics, March, 1896 Abstract, Annals of Surgery 1896 vol. xxiv, p. 757	Ureter implanted by two Van Hook traction sutures. The bladder wound was closed in three layers by continuous catgut sutures which were also made to fix the ureter There was considerable tension on the ureter so the bladder was fixed by suture to the pelvic wall close to the stump of the ovarian artery	R	Glass drainage tube; removed on third day Catheter every four hours.	Right ureter was torn across in enucleation of an intra ligamentary cyst. Tumour and uterus were removed.
1896 (published)	Witzel Centralblatt für Gynäkologie, 1896, No 11 Kelly's Operative Gynæcology, vol. i. p 464.	Ureter traced from the pelvic brim and divided at the middle of the broad ligament. The lower end was closed The upper end was drawn beneath the peritoneum above the innominate line by long forceps started upwards under the peritoneum to the right of the bladder The peritoneal incision was closed. The remaining proceedings were extra peritoneal. The bladder was pulled up and attached on the right side until the ureter cut obliquely, could be implanted on the same principle as in Witzel's method of gastrostomy—by oblique channel made by uniting folds of bladder walls on each side over the ureter	R	Bladder drained.	Uretero-vaginal fistula for which vaginal operation had failed.
	Anna Fullerton, quoted by Kelly: Operative Gynæcology, vol. i, p. 483.	Double ureter divided accidentally Vesical ends ligated. Both orifices were introduced into the bladder by a common opening	R.	—	Double pyosalpinx.

Sacral, Vaginal, and Vesical Operations

1894 (May 2nd)	Westermark: Annals of Surgery, 1896, vol. xxiii, p 333.	Sacral incision. Cut end of ureter was sutured into the partially closed defect in the bladder A double row of sutures were so arranged that the sides of the ureter were united with the sides of the bladder	R	Well, Feb. 9th, 1895	Carcinoma uteri in which the bladder and left ureter were involved. Removal of affected parts.
—	Abbe: Annals of Surgery 1894, vol. xx., p. 183	Sacral incision. Ureter inserted into the vesical pouch.	R.	No leakage Patient believed to be cured.	Supposed abscess; really foul vesical pouch ureter torn.
—	Davenport, quoted by Fenger: Annals of Surgery, 1894, vol. xx., p. 287	Vaginal operation Ureter displaced and the orifice implanted into the bladder	R.	—	Ureter opening close to the external orifice of the urethra lying in vesico-vaginal septum and causing incontinence
1892 (published)	Baumin: Annals of Surgery, 1894, vol. xx p. 286 (Fenger's paper)	Bladder opened (suprapubic), misplaced ureter divided distal end ligated proximal end connected with bladder operation extra peritoneal.	R.	This operation was chosen because the patient was a virgin	Accessory ureter opening into urethra and causing incontinence
1896	E Kuster Abstract, Annals of Surgery, 1897, vol. xxv, p. 663 Verhandlungen der Deutschen Gesellschaft für Chirurgie, Twenty-fifth Congress, 1896.	A man, aged 32 years Suprapubic section, evidently cystotomy Removal of a large portion of bladder-wall and several centimetres of ureter Ureter sutured in the upper angle of the bladder defect which was then sutured throughout The bladder was left open for secondary suture.	R.	—	Growth of bladder

It has not been thought worth while to separate the cases into groups, but in two cases the operation was performed for a congenital condition and not for injury immediate or remote.

may be constant with exacerbations or it may ntermit so that there are intervals of complete freedom It was first pointed out by Treves that the intermittent type of pain is found in those cases where the occlusion of the bowel is incomplete and that the constant type of pain is found in those cases where the occlusion is absolute The pain has a direct relation to the constitutional depression. In fact, those patients who feel pain most acutely are the ones who show the depression most markedly Vomiting varies in amount in different cases and varies as to the period of its occurrence It is greatest when the obstruction is near the stomach and it is least when the obstruction is far removed from it It is a very distressing symptom and it rarely affords the patient any relief It may be incessant or it may occur at intervals and in a few cases it is absent altogether The vomited matters consist of the contents of the stomach and intestine as far as the obstruction, sometimes beyond it In such cases it is supposed that the obstruction has relaxed for a brief space and allowed some of the contents below that point to re gurgitate It is accompanied by thirst which varies directly with the vomiting Constipation is absolute when the occlusion is complete It is said that it may be preceded by diarrhœa, but of the recorded cases it is found that only about 2 per cent have had a spontaneous evacuation of the bowels when once the occlusion has become complete, even though it be situated high up in the small intestine The tongue varies It may be clean or furred, but as the case goes on it becomes dry and brown Owing to the contents of the bowel being unduly retained and owing to altered nerve action fermentation of the contents takes place with the liberation of gas and consequent distension of the abdomen In some cases this may attain so excessive a degree that the breathing may become greatly embarrassed and the patient may complain of "feeling as if he would burst." Prostration usually occurs early in a case of strangulation and it may rapidly deepen into fatal collapse. The face is drawn, pinched and anxious, the eyes are sunken, the voice is feeble, the surface of the skin is cold and is bathed with sweat, but the intelligence remains clear to the last. The pulse is small, rapid, and feeble, ranging from 120 to 140 The temperature is commonly lowered, being subnormal, and even the occurrence of peritonitis may be insufficient to bring it up to the normal level though it may be influenced by treatment as may be the pulse and vomiting But of that more will be said later The respirations are increased in frequency and they are superficial and often supracostal, and are embarrassed by the distension The urine is scanty and high-coloured and in some cases it may be actually suppressed when there is great collapse.

To return now to the main subject let us look at the anatomical regions where obstruction occurs First, in the small intestine it may be due to loops, bands, or internal hernie The greater mobility of this part of the bowel favours this form of lesion Secondly, in the cæcal region it is more commonly due to hernie, concretions, accumulations, growths, or appendix. Thirdly, in the large intestine it is usually due to growths twists, or intussusception Now, it is impossible that all these different anatomical regions when obstructed can give rise to the same clinical symptoms, for we know that the symptoms produced by disease, in many cases at all events, are due to physical causes, and in practice we find that the symptoms vary with the site of the lesion. And if we are to treat these cases rationally we must endeavour to appreciate the varying phenomena in each case I believe that cases of obstruction may be divided into three great classes or types which in their well marked forms are clearly and distinctly separated but which merge into one another by insensible gradations and that for certain anatomical and physiological reasons which will be apparent to all

Take a case of stricture of the large intestine in its second half and we do not find the classical symptoms The patient is constipated, he passes little or no flatus, and he has little or no vomiting and that may never become fæcal or only so towards the close He suffers little pain, he eructates a quantity of wind he has distension, and his appetite is lost Again, take a case of obstruction high up in the small intestine and we find that the patient presents a totally different set of symptoms He has pain he vomits but the vomit is not fæcal he may pass some flatus and the bowels may act in such a manner as to put us off our guard A part of the symptoms presented by a patient with obstruction are dependent upon the amount of bowel there is above the obstruction to be gorged and the length of gut below that point which may be evacuated The patient cannot have fæcal vomiting if the upper part of his bowel does not contain fæcal matter Let us see if the three types of which I spoke can be differentiated clinically

1 Take a case of obstruction low down in the second half of the large intestine I cannot do better than mention a case of this kind lately under my care The patient complained of pain in the region of the umbilicus which was worse after taking food, the abdomen was distended till she could scarcely breathe, the bowels would not act satisfactorily, she eructated a quantity of flatus but passed none, she felt sick and brought up most of the food she took, but the vomit was never fæcal—once only it was like beef tea grounds but it was not offensive The tongue was furred, the abdomen was distended and tympanitic all over and globular in shape—i e, it was bulging in the flanks as well as forwards Per rectum there was a feeling of resistance to be made out high up, but nothing definite, and enemata gave no relief In this case the only definite symptoms were globular distension of the abdomen, failure of the bowels to act, and umbilical pain The furred tongue was of no value and there was a complete absence of constitutional symptoms The case was one of stricture of the sigmoid

2 In the second type the symptoms are somewhat different Take a case of obstruction low down in the small intestine in the neighbourhood of the ileo-cæcal valve We find the patient has umbilical pain vomiting which rapidly becomes fæcal, furred tongue which soon becomes dry and brown and distension of the abdomen, the bulging being chiefly forwards with little or none in the flanks, indeed, the flanks may be quite flat The abdomen may be tympanitic throughout and rectal examination may elicit nothing worthy of note The bowels may act a little with enemata and a little flatus may be passed, but not satisfactorily This class of case is usually more urgent than the last mentioned The case from which these notes were taken died from acute obstruction in 48 hours

3 Next let us study a case where the obstruction is high up in the small intestine, say in the jejunum It must be admitted that simple obstruction here is very rare and we must take as an example a case with that other condition superadded—viz, strangulation The case is always an acute one The patient has intense pain in the region of the umbilicus, soon followed by vomiting which does not become fæcal though it may be disagreeable The tongue may be furred, but it rapidly becomes dry and brown, the bowels do not act, and the constipation is absolute Examination per rectum may afford no useful information The abdomen is tympanitic throughout, but the contour is unaltered, it presents to the eye no obvious difference in shape from the normal healthy abdomen of the same individual. In addition the patient presents all those symptoms of profound constitutional depression which have been already referred to and need not now detain us

In all three types there is pain in the region of the umbilicus and in types 1 and 2 there may be some tender spot or resistance to be felt per rectum In the first type there is great distension of the abdomen, the bulging being both forwards and lateral, and there is little vomiting, in the second type there is distension of the abdomen, but less than in the first type, the bulging is forwards not lateral and the flanks are quite flat The vomiting is early, well marked, and fæcal In the third type there is no alteration in the shape of the abdomen and the vomiting is early and may be severe but it is never fæcal Again, the first type is practically always chronic—the only exceptions being volvulus and intussusception, the second type may be acute or chronic, and the third is always acute In the chronic forms the outlines of the coils of intestines, large or small or both, as the case may be, are visible standing out prominently on the abdominal wall, and can always be made more so by friction with the fingers This sign is, of course, most marked when the subject is not obese After some consideration I think the three types may be arranged as follows (1) those in which there is pain, great distension fæcal vomiting little and late, and globular bulging, in which the bowels do not act, and there is no flatus, (2) those in which there is pain, medium distension fæcal vomiting early and median distension, in which the bowels may act, and there is little flatus, and (3) those in which there is pain, no distension, no fæcal vomiting, and no alteration in shape, in which the bowels do not act, and there is no flatus

colon or other portion of the bowel attaining the position of a sound surgical measure With the satisfactory results which can now be obtained by uretero-ureteral anastomosis and uretero-cystotomy it is safe to conclude that implantation into the bowel has been relegated to the limbo of oblivion

Ligation of the ureter—Nor is it likely that ligation of the ureter will ever have a practical value in ureteral wounds Guyon suggested it as a substitute for nephrectomy in these cases to save an undue prolongation of the operation,[11] for as soon as the distension pressure in the pelvis and ureter equals the blood pressure the secretion of urine ceases and experiments tend to show that atrophy of the kidney results. For this to occur, however, the urine must be aseptic, or a pyonephrosis will develop, and, needless to say, the presence of a second kidney is essential One fact, however, is interesting By ligation of the ureter the function of the kidney may be kept in abeyance for a period without obvious harm Thus, Robinson[12] quotes the case of a woman in whom the ureter of one side was ligatured for six weeks At the end of that time the ligature was removed and the kidney resumed its function as before And whoever has watched a ureteral fistula develop on the separation of the ligatures in vaginal hysterectomy has seen the same fact accidentally demonstrated Simple as the proceeding is, it does not appear to be at all free from the risk of miscarriage, and this uncertainty as to risk and eventual result outweighs any advantage which the ease of its performance might give it in the rare cases in which it might be made use of

DIAGNOSTIC URETEROTOMY

The subject of ureteral injuries should not be dismissed without reference to a plan known as "diagnostic uretero tomy" which has been introduced by Dr Howard Kelly whose labours have done so much to advance this department of surgery In four operations in which he had reason to fear that he had included a ureter in a mass of ligatured tissue he exposed the ureter at the pelvic brim, made a longitudinal incision into it, and passed a ureteral sound down towards the bladder In two cases he found the ureter free, but in the other two the sound stopped short at the ligated area The ligatures were removed and the sound passed on into the bladder The incision was closed with mattress sutures and though in three at least of the cases a gauze drain was used no leakage took place and no trouble resulted either from the temporary ligation of the ureter or from the operation[13] As Mr Henry Morris points out in his interesting Hunterian Lectures the general tendency of advance in renal surgery is in the direction of conservatism The first nephrectomy was performed by Simon 30 years ago for ureteral fistula and injured ureters were at first treated in the same way With the gradual growth of ureteral surgery nephrectomy has fallen into the background and in the case of wounds will be very rarely justifiable And diagnostic ureterotomy, inasmuch as it aims at the prevention of wounds or the avoidance of the suppression of the functional activity of one kidney, is a step in the same direction

Leeds.

INTESTINAL OBSTRUCTION[1]

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WHEN I promised to read a paper before the Swansea Medical Society it was with many misgivings, and in appearing before you to night it is not with the idea of saying anything new but rather with a view of inviting discussion and eliciting your opinions For it is written that "in the multitude of counsellors there is safety," even though it may be the counsellors only who are safe

The subject of abdominal surgery is one which has engrossed the minds of medical men during the last few years more than any other subject in medicine, excepting perhaps that of bacteriology Within the cavity of the abdomen are contained many and most important organs, not the least of which is the alimentary canal, the functions of which are associated with much of the joy and misery of this life. But it is not so much with the functions of the bowel that we are concerned to night as with stoppage of the vital though turbid stream within it The subject of obstruction is not the least important of those which fall within the domain of abdominal surgery, and though much has been written and said concerning it I hope you will bear with me while I endeavour to lay before you certain facts which may in some slight way serve to increase your interest in the matter

The causes of obstruction are so varied and their mode of action so complicated that it is impossible in a short paper like this to do more than mention some of them They may be arranged under three heads (1) those in the bowel, (2) those in the bowel wall, and (3) those outside the bowel wall Those in the bowel are (*a*) concretions, intestinal or biliary, (*b*) fæcal accumulations, (*c*) foreign bodies, and (*d*) tumours Those in the bowel wall are (*a*) cicatricial stricture, (*b*) stricture due to tumours, simple or malignant, (*c*) twists, and (*d*) intussusception Those outside the bowel wall are (*a*) bands inflammatory or other, adhesions whether binding the gut to other organs or surrounding it, and kinking, (*b*) stenosis produced by holes in the mesentery or omentum, internal herniæ, and (*c*) occlusion by fœtal remains, as Meckel's diverticulum Lastly, there is an important group which is quite distinct from these—viz, hernia of omentum, strangulated ovarian cyst, orchitis in an undescended testicle, crushed testicle, inflamed hydrocele, phlegmon of the upper part of the abdominal wall, perforating gastric ulcer; paralysis of the bowel, appendicitis, and peritonitis With the subject of external hernia I do not propose to deal

It has been stated that the cause of obstruction may be in three positions as regards the wall of the bowel It may also be in three positions as regards the length of the gut It may be low down in the second half of the large intestine, it may be high up in the small intestine—jejunum, or it may be intermediate in position, say in the lower part of the ileum It may, again, be acute or chronic

It is often complained that too much is made of the pathological aspect and mechanism of conditions which are met with by the busy practitioner and not enough of the signs and symptoms by which these conditions may be recognised and treated Now it is not my intention to burden you with an account of conditions which can only be made out in the post-mortem room, but rather to dwell upon the signs and symptoms by which obstruction may be recognised For upon the recognition—nay, upon the early recognition—of the case depends the treatment and the safety of the patient

Let us look for a moment at the classical symptoms of obstruction with which you are all familiar We find that they consist of pain, of fæcal vomiting, of stoppage of the bowels both to wind and more palpable material, sometimes preceded by spurious diarrhœa, of swelling of the abdomen or meteorism consequent upon which there is more or less difficulty of breathing, alteration of pulse, furred tongue, scanty urine, and general depression I think it may be taken as an axiom that all patients who have these symptoms have obstruction, but all who have obstruction have not these symptoms and it is to draw your attention to these cases that I have ventured to address you to-night When we consider the classical symptoms we are struck with the fact that in many cases of obstruction there is not the condition of obstruction only to deal with, but that there are really two conditions—viz, obstruction *plus* strangulation—and, further, that strangulation is by far the most urgent condition Let us consider the classic symptoms individually

Pain is one of the earliest symptoms to appear and it is one which it is well worth while to study carefully Its origin is twofold It is due (1) to the direct injury caused to the tissues by the constricting agent, and (2) to the violent, irregular, and futile peristaltic action of the bowel It is colicky and paroxysmal in character and though it is produced at varying points in the abdomen, yet there is a singular uniformity as to the position in which it is felt It is felt in the region of the umbilicus It is relieved by pressure and is generally unassociated with tenderness It varies in amount at different times and one feature of special importance is that it

[11] Emmett's paper: American Journal of Obstetrics, 1895, vol. xxi, p. 449.

[12] Annals of Surgery, 1893, vol xviii. p. 507

[13] Johns Hopkins Hospital Bulletin, December 1894 Kelly Operative Gynæcology, vol. i p 465.

[1] An address delivered before the Swansea Medical Society on Jan. 24th 1899 [illegible]ury

attended by a very high mortality, while the operative treatment of strangulated external hernia has been followed by the most gratifying results Why! Because the condition is readily seen and recognised and the operative treatment is undertaken in time No one nowadays would think of waiting to try the effect of internal remedies in a case of external hernia It is recognised that the safety of the patient lies in early operation If it were so in the case of internal strangulation it would be to the credit of surgery and to the advantage of the patients The reason that the operative treatment of internal strangulation is so serious is that in the majority of cases the operation is deferred until the tissues have become irreparably damaged and the vital powers exhausted. This is due in part to the difficulties in diagnosis, in part to the rapidity with which the involved tissues become disorganised, and in part to the reluctance we all have to operate When I tell you that the average duration of life after the occurrence of strangulation is only five days and that the bowel becomes gangrenous on the third day it will readily be seen that the period during which the gut is recoverable is very short Indeed, it may be said to be less than 48 hours What is important for us to remember is that a patient may have obstruction and not present the classical symptoms and that we may temporise until the gut is beyond recovery and the vital powers hopelessly depressed In the old days the rule used to be, "When in doubt wait" Now the times are changed and we say, 'When in doubt operate" With the improved methods of surgeons the risk of operation is much less than that of waiting When it has been decided to operate the exhibition of opium is of the greatest value It improves the pulse, lessens the risk of anæsthesia by stopping the vomiting, and diminishes the shock Whatever operation it is decided to perform it is absolutely necessary that the obstruction should be relieved at the time "No case of obstruction" said the late Greig Smith, ' should leave the operation table with the bowels distended."

The first step in operating upon a case of internal obstruction or strangulation or both is to perform laparotomy, preferably in the middle line There are few conditions which cannot be dealt with through a median incision and it is by far the best for exploration The abdomen having been opened the hand should be introduced and the cæcum examined If that organ is found to be distended then we know that the obstruction is in the large intestine, and we must then examine the large gut systematically until the position of the obstruction and its nature have been ascertained. If, on the other hand, the cæcum is found to be collapsed we know that the block is in the small intestine, and probably the easiest method of finding the lesion is to follow up the collapsed small intestine to that point. In some cases the distension is so great that the obstruction cannot be found, the intestines protrude through the opening, and it is impossible to get the hand into the abdomen In such cases it is better to take the most prominent loop of bowel and open it by the method to be detailed later, or else to puncture the intestine at a more distant point through the abdominal wall The site of the obstruction and its nature having been ascertained the next point is to decide upon the best line of treatment to employ The treatment now will vary with the form of obstruction Hernæ will be reduced, bands, cords, loops, and nooses will be divided, a diverticular band will be removed with the special precautions applicable to that body, twists will be untwisted if possible, and adhesions will be broken down All this is very simple and I need not detain you with any further details of this kind But we must devote a little time to the consideration of the bowel If the bowel be gangrenous, kinked, too matted by adhesions to be freed, strictured, or the seat of malignant or other growth, then it will be necessary to excise the affected part There is some difference of opinion as to the manner in which this should be accomplished Two methods are open to us—(1) to excise the segment of bowel which is affected and at once proceed to join the ends of the divided gut, and (2) to perform enterotomy or colotomy, removing the affected part if necessary at the same time and later to suture the ends of the gut at another operation when the patient has recovered from the effects of the obstruction and regained strength In favour of the first method it is maintained that all is done at one operation and the risk of the second is saved But against it there is, it must be admitted the weighty argument that the patient is not in a condition to bear the strain of any lengthy procedure The bowel above the obstruction is distended, it is not easy to handle and it is unlikely to heal quickly, for it is kept in a state of constant unrest and it does not give rapid relief to the distension—in fact, it may give no relief at all It is not easy accurately to tell how much bowel should be removed and stricture is more likely to follow intestinal anastomosis when the gut is distended than when not so In favour of the second method it may be said that it is quickly performed, that the condition for which the operation was primarily undertaken is at once relieved, and that the patient has time to regain strength before the more lengthy procedure is undertaken, for which due preparation can be made, while the objections against the first method are all overcome by this The only drawback to the second method is that it necessitates two operations but experience seems to show that it is the best

Colotomy is an operation which has been said to be something in the nature of an admission of failure and in the pre antiseptic days perhaps it was so The operation is so old that it would seem unnecessary to say anything about it on the present occasion and yet I think that something may still be learned by looking at the old operation from another standpoint The method which I have adopted for nearly three years now is as follows—and I would venture earnestly to recommend it to your thoughtful consideration as being easily accomplished, as giving complete and speedy relief to the obstruction and safety to the patient, and as being quite as applicable to the small intestine as to the large

The abdomen is opened by a suitable incision and the bowel above the obstruction and as near to it as possible is seized and brought out of the wound A glass rod or other suitable object is then passed beneath the bowel through the mesentery and fixed in position A purse string suture is then run through the serous and muscular coats of the bowel on its convex surface so as to include an area of about the size of a penny piece A glass tube about two inches in length and three-quarters of an inch in diameter and having two shoulders at one end is placed with the shouldered end within the area of the purse string suture and the suture is drawn tight and tied off The tube is then pressed against the bowel and the wall of the gut is drawn up round the tube and tied above the second shoulder If the purse string suture has included a sufficiently large area there should be no difficulty in tying the second ligature above the second shoulder It may be tied below the second shoulder with perfect safety, but it must be above the purse-string suture The tube is then raised so as to put slight tension on the gut, a scalpel is then passed down the tube, and the bowel is incised with a crucial incision The finger then presses the gut against the opening just made so as to prevent the contents escaping, while a rubber tube is placed on the free end of the glass tube When the rubber tube is in position the finger is removed and the contents allowed to drain away into a suitable receptacle In a few minutes the distension is relieved and the abdomen becomes flaccid Should the abdominal wound be rather large a suture or two may be put in, otherwise nothing further is needed. In a few days the ligatures cut their way through and the tube separates By that time the peritoneal cavity is completely and securely closed. The tube usually separates in about seven days The glass rod may be left for 10 days or more as it is thought desirable. After the tube separates the opening in the gut will require enlarging Usually one finds that the dressing requires no attention from the time of the operation till the tube separates beyond tightening the bandage as the abdomen subsides The reason for the second ligature is to prevent leakage, which would be inevitable at the purse-string suture Incising the bowel through the glass tube and guarding the end of it with the finger have the same object in view I have used this method in a considerable number of cases and the results have been so satisfactory that I shall continue to employ it in all cases of this kind in future unless it is superseded by something better

Finally I would briefly emphasise the following points (1) that a patient may suffer from fatal obstruction and not present the classical symptoms, (2) that the symptoms of obstruction vary with the site of the obstruction, (3) that early and definite diagnosis is essential, (4) that the use of aperients is likely to do harm, (5) that the exhibition of opium is likely to mask the symptoms and to produce signs of improvement which are entirely delusive, (6) that the time during which operative treatment is likely to be successful is very short, (7) that the bowel must be evacuated at the

It will be well to mention two other forms of obstruction at this place—viz, volvulus and intussusception In volvulus—I refer to that of the sigmoid—the onset is always acute, it presents the characters of the first type with rapid and great distension of the abdomen soon followed by great tenderness commencing in the left iliac region and spreading thence over the abdomen due to early peritonitis Intussusception is never a form of complete obstruction and consequently the symptoms it presents do not assume the characters of any type—nay, further, the position of the obstruction varies at different times But there are two or three points which it is well to bear in mind concerning it that may be of great assistance in preventing error These are, first, that the tumour may not be palpable except during the paroxysms of pain, secondly, that it can never be felt in the hypochondriac regions, thirdly, that there is usually well marked tenesmus, and fourthly, that there is the occurrence of bloody mucus in the motions I need not dwell on these matters

Lastly, there is a set of cases which require to be specially mentioned and which are of great importance from the point of view of treatment I refer to cases of spurious strangulation, false strangulation, and pseudo-strangulation In this condition the patient presents all the signs and symptoms of acute strangulation and obstruction without there being any interference with the lumen of the bowel It is due to various causes, amongst which may be mentioned orchitis in an undescended testicle, inflamed hydrocele, phlegmon of the upper part of the abdominal wall, perforating gastric ulcer, perforating appendicitis, peritonitis, paralysis of the bowel, and strangulated ovarian cyst or fibroid In this class of cases the symptoms are always acute and the type which any case assumes will depend on the time for which the condition lasts At first the case will present the characters of the third type and later those of the second type, but probably only the first type when the condition is peritonitis and paralysis of the bowel If the patient dies rapidly the case may retain the characters of the third type to the end

DIAGNOSIS

The question of diagnosis is very perplexing and I suppose there are few, even of the most experienced, who have not at times felt wiser after, or at least towards the close of, a case of obstruction than they did at the beginning For this reason I think that we may, I hope not unprofitably, devote a little time to the consideration of this subject For purposes of diagnosis cases of intestinal obstruction may be divided into the following 1 Cases of acute obstruction 2. Cases of chronic obstruction 3 Cases of chronic obstruction in which symptoms of acute obstruction supervene

1 *Acute obstruction*—This may be due to a lesion of either the small or the large intestine In the small intestine it may be due to strangulation by bands or through apertures, by kinking, by foreign bodies, and by one variety of intussusception In the large bowel it may be due to volvulus or intussusception In the first place it is important that we should make a thorough examination of the case All the usual regions where hernia occur should be carefully palpated, explored the abdomen should be carefully percussed and inspected, and the rectum should be examined The nature of the pain should be carefully investigated as to constancy or not and the condition of the patient between the paroxysms of pain The vomit and other evacuations should be inspected if possible

Let us assume a case where the obstruction is complete The following points will be of value in assisting to a conclusion The pain will be constant with paroxysms during which the vomiting will most probably be marked The vomit may be fæcal or not fæcal—that does not matter There is complete constipation and no flatus is passed The patient is in a condition of prostration, with a pinched face, cold sweat, pale or livid skin, a rapid, small, and feeble pulse, and a tongue becoming dry and brown He passes little urine which is high-coloured, he is anxious about his condition, and mentally he is in a state of horrible anxiety On looking at the abdomen we may get valuable information If the abdomen be distended, bulging both forwards and laterally, and if there is tenderness in the left iliac region or if there is tenderness over the greater part of the abdomen but worse in the left iliac region and tympanitic on percussion then the case is most probably one of volvulus of the sigmoid If the abdomen is tympanitic with little or no tenderness, with bulging forwards but not laterally, then the case is most probably one of obstruction low down in the small intestine Again, if the abdomen is tympanitic and unaltered in shape—i e, with no distension or at least distension of the stomach as sometimes occurs before vomiting—then the obstruction is probably high up in the small intestine In intussusception the obstruction is never complete and the contour of the abdomen presents no guiding characteristic, but during the paroxysms of pain the hand may discover a tumour, there are tenesmus and the evacuation of bloody mucous discharge The case, too, is seldom very acute

2 *Chronic obstruction*—This may be due to stricture of the small or the large intestine, to fæcal accumulation, or to chronic intussusception The patient complains of digestive troubles with attacks of colicky pain in the abdomen, the bowels do not act satisfactorily, and he probably finds that the indigestion, the pain, and the constipation occur together He is also much troubled with flatulence The tongue is probably furred, the breath is offensive, and little flatus is passed On examining the abdomen if we find a tumour in the line of the large bowel which pits on pressure and probably is somewhat tender it is fæcal accumulation If the tumour hardens or becomes more distinct under pressure then it is intussusception If the abdomen is distended, bulging in the flanks as well as forwards—i e, globular in shape—with or without coils of intestine showing on the surface, tympanitic, and with no tumour to be made out, then the case is one of stricture of the large intestine low down If the left flank is flat and the right bulging the stricture is above the descending colon If both flanks are flat and the bulging is chiefly forwards then the stricture is low down in the small intestine If the abdomen is unaltered in shape or bulging only in the upper part then the obstruction is high up in the small intestine

3 *Chronic obstruction in which acute symptoms supervene*—It will be unnecessary to enter into this class of cases after what has been already said The cases present the symptoms of acute obstruction like those mentioned, but inasmuch as there may not be strangulation the constitutional depression may be much less marked

TREATMENT

The treatment may be divided into the medical and the surgical The medical treatment comprises the administration of drugs, the arrangement of the diet, and attention to the creature comforts generally and the use of enemata The use of enemata is of great value both as a means of treatment and as an aid to diagnosis and should be employed as early as possible As regards drugs, the number which are of any use in these cases is very small and their value is very limited No drug has yet been discovered which is capable of undoing a twist of the gut, loosing a knot, or reducing a hernia, but there is one drug or group of drugs the use of which may be, and is likely to be, fraught with disaster I refer to aperients Unfortunately they are usually administered by the friends of the patient before the case is seen by a medical man There is ample evidence to prove that this class of remedies has converted chronic cases into acute and has turned the balance against those of a less urgent character It would appear that the use of aperients is, if anything, worse than the unguarded use of opium This drug is of special value, indeed, its great value is one of the chief drawbacks to its use On this account it should not be administered until the diagnosis has been made This having been accomplished, and it being borne in mind that it is but a palliative measure, it will be found that the vomiting the pain, the subnormal temperature, the pulse, the scanty urine, and the collapse, are all improved by it But in many cases it is a broken reed to lean upon, for the very benefits it confers lull both the patient and his medical attendant into a sense of security which is very likely to prove entirely delusive and the sad awakening comes all too late I believe that the administration of opium is calculated to improve a patient's chance of bearing the shock of operation Finally the medical treatment of a case of obstruction may be briefly summarised by saying that it usually consists of waiting till it is too late

In the present state of our knowledge I fear that any hope of recovery which cases of obstruction may have must depend upon surgery, not upon medicine And here we come face to face with the question of operation, which is always a serious one both for the medical adviser and the patient The operative treatment of intestinal obstruction has been

good condition she was in, I could not refuse to undertake the operation The operation was performed on Oct 5th, 1897 by a method of my own without opening the peritoneum The only peculiarity observed was that the sub-peritoneal vessels were large and bled freely She recovered in an hour from the immediate effects of the operation but towards evening became very restless and complained of pricking pains and numbness in her arms and legs Next morning after a restless night I found her distinctly jaundiced and complaining still more of the numbness and pain in her arms and legs which were very tender when touched The jaundice and restlessness increased and on the second day after the operation she became comatose and died at night, deeply jaundiced

Post-mortem evidence.—At the necropsy Mr W G Richardson removed the whole of the abdominal viscera and the parietes, excepting the skin, *en masse* He then injected the whole from the trunk of the portal vein I showed the specimen at a meeting of the Northumberland and Durham Medical Society on Nov 11th, 1897, and in demonstrating it I said[2] "The liver the spleen and the intestines are seen to be attached to the parietes chiefly by numerous band like adhesions (Many of these seemed to contain little except a blood vessel and in several of them such vessel was four inches in length) The omentum also is firmly adherent over the anterior abdominal wall by strong bands In all of these adhesions innumerable injected vessels are readily seen passing from the omentum and viscera to the parietes Many of them are fully the size of a normal radial artery The sub-peritoneal plexus of vessels forms a dense large network.

This specimen establishes our belief that an efficient anastomotic circulation can be brought about by operation There can also be no doubt that this patient was cured of ascites and that useful life was prolonged to her for two years by the operation. A further examination of the specimen shows the liver to be much atrophied and degenerated The spleen is at least four times its normal size It is quite evident that the obstructed portal circulation has nothing to do with the splenic enlargement—in this case at all events—for the new anastomotic circulation is clearly more than sufficient to compensate for any diminution in size of the portal vein."

Dr Bolam reported as to the microscopic condition of the liver. 'Typical cirrhosis with much fatty degeneration Fibrous tissue well formed So called new bile-ducts present in numbers, liver cells showing extreme fatty degeneration in all zones and normal cells few and situate in central portion of lobule "

In another case I have performed the operation for the cure of ascites and though the case is of no value in forming an estimate of the worth of the method I think it is right to report it, as the introducer of a new operation should be expected to offer the whole of his experience concerning it.

The patient, a woman aged 54 years, was sent to me by Dr Welsh of Felton when she was very ill. She was an excessively stout woman and had enormous distension of the abdomen 18 months previously she noticed her legs to be swollen for the first time One year previously though always very stout, she found herself getting stouter and this was most noted in the abdomen. Up to two months ago she was able to attend to her business and felt fairly well, then the swelling of her abdomen and legs which had been steadily increasing incapacitated her and for the last three weeks she had been confined to her bed. Her mother died from "consumption" and her father from pneumonia, all her father's family had had delicate chests and her only sister had died from "consumption" Eight years previously the patient had had pneumonia and bronchitis, to which she was subject, but otherwise her health had been good. A year after this she had a rupture at the navel

When I saw her on March 5th, 1897, her legs and abdomen were enormously swollen and beyond ascertaining that there was a quantity of free fluid in her abdomen and some albumin in her urine I learned nothing from careful physical examination On March 6th I tapped her and removed five and a half gallons of ordinary ascitic fluid. This made no appreciable difference in the size of the swelling but I thought that I could now feel that the bulk of the enlargement was due to a round elastic tumour On March 18th I opened her abdomen and found in addition to a quantity of ascitic fluid an enormous multilocular cyst The abdominal incision was extended so as to include the umbilicus and the sac of a hernia and these were excised After separating the adherent omentum the tumour was found to be of the left ovary and to be buried in the broad ligament An extensive enucleation was necessary for its removal but very little blood was lost The liver was seen to be cirrhotic and the spleen and the omental vessels to be enlarged, so the omentum was sutured across the anterior abdominal wall The abdomen was closed without drainage For the first week after the operation the patient was exceptionally well and looked as if there was no doubt as to her recovery Then she had an attack of diarrhœa with some vomiting, she became lethargic, and she refused her food On March 27th it was noticed that her pulse had become markedly intermittent. She steadily went downhill and died on March 29th, on the eleventh day after the operation A post-mortem examination limited to the abdomen corroborated the opinion formed at the operation. There was some free fluid in the abdomen Both kidneys were in an advanced cirrhotic condition, not smaller than normal, but markedly granular on the surface with adherent capsules There were no surgical complications I think, judging by the symptoms and the result of the limited post-mortem examination, that death was due directly to the kidney lesion.

It is more rare than I thought to see uncomplicated cases of liver cirrhosis and ascites Valvular heart lesions, thoracic aneurysm, albuminuria, and glycosuria, are the most frequent complications which I have met with and each would seem to contra indicate operation because but seldom can the latter two be temporary Of my two previously recorded cases one was successful in curing the ascites, the other was not[3] The clinical diagnosis of liver cirrhosis was not in the latter case corroborated by surgical examination of the liver, and Dr William Ewart suggested at a meeting of the Harveian Society of London on April 6th 1899, that my case might be similar to one under his care In his case the operation failed to cure an obstinate ascites which was believed to be due to liver cirrhosis and his patient died like mine several months after the operation In his case the post mortem examination showed a universally adherent pericardium stiffened by a layer of calcareous salts which must have precluded the contraction of the ventricles The liver was not cirrhosed.

I have now operated on four cases Two were uncomplicated and were regarded as suitable cases for operation and both of them were cured In one the diagnosis was doubtful, and in another the complications were such as to preclude recovery

The conclusions which I have come to are as follows 1 Ascites due to liver cirrhosis can be cured by the establishment of an efficient anastomotic circulation 2 Adhesive peritonitis produces adhesions between the abdominal contents and its parietes in which new blood vessels form If there is any demand for the new blood vessels they remain permanently 3 The operation described in the paper by Drummond and myself[4] is the safest and most certain method of producing adhesions 4 It is no longer advisable to treat the ascites due to cirrhosis by repeated tappings if the patient is otherwise sound and in fair general condition After one or two tappings have failed operation offers the best chance of prolonged and useful life

Newcastle-on Tyne.

[2] Northumberland and Durham Medical Journal, January 1898, p. 52

[3] Brit. Med. Jour Sept 19th, 1896.

[4] Ibid.

BRISTOL JUBILEE CONVALESCENT HOME—At a recent meeting of the governors of this institution it was stated that when all the expenses of the home had been paid £55 000 will remain for endowment purposes Mr E P Wills has since promised to subscribe £5000 provided another £15,000 be raised within three months This would be sufficient to give the £65 000 required to endow the 65 beds allotted to the infirmary, hospital and other medical charities and would leave a sum the income from which would be applied to reducing the charge made for the 15 beds allotted to other patients Mr J S Fry has promised to provide the last £2000 of the £15,000 required and Mr Vaughan has given £1000 for the endowment of another free bed

time of the operation, otherwise the patient may die poisoned by his own excrement, and (8) that it is probably safer to be content with colotomy or enterotomy where the bowel is seriously damaged than to attempt an operation for anastomosis

Swansea.

CURE OF ASCITES DUE TO LIVER CIRRHOSIS BY OPERATION

NOTES OF A SECOND SUCCESSFUL CASE AND OF A POST-MORTEM EXAMINATION

BY RUTHERFORD MORISON, F R C S EDIN,
SURGEON TO THE ROYAL INFIRMARY NEWCASTLE-ON TYNE.

DR. DRUMMOND and I have already published a paper[1] on the cure of ascites due to liver cirrhosis by a surgical operation The design of the operation, as we then pointed out, was to relieve the obstructed portal circulation by the establishment of an efficient anastomotic one I propose to offer now further evidence, both of a clinical and post-mortem character, that this can be successfully accomplished

A man, aged 42 years, was sent to me in January, 1897, by Mr G Longbotham of Middlesbrough, complaining of swelling of his bowels It appeared that eight weeks previously he had felt unfit to attend to his business from weakness, having an uncomfortable puffed up feeling after meals and being somewhat swollen Since the beginning of the year the swelling had increased very rapidly Except for a history of three attacks of pneumonia, always in the left lung, there was nothing to note in his previous health and his family history was excellent With regard to alcohol he said that he never took more than a pint of beer to his dinner and supper, and very occasionally a glass of whisky, and that he had always been temperate This statement was corroborated by his wife and by Mr Longbotham His arms, his legs, and his chest had got much thinner since his illness commenced His organs, with the exceptions to be presently noted, appeared to be sound His abdomen was much swollen and it felt tense All the signs of a large collection of free fluid were present No liver dulness could be distinguished His spleen was so much enlarged as to fill the left ilio-costal and lumbar spaces and to bulge forward the left flank A distinct notch was felt in the tumour, showing it to be spleen, in a line drawn from the umbilicus to the ninth left costal cartilage and midway between the two Never having seen so large a spleen before in liver cirrhosis, before deciding to operate I asked Dr Drummond to see the patient He concluded that the ascites and enlarged spleen were due to liver cirrhosis and advised operation

The operation was performed on Jan 12th, 1897, under chloroform The abdomen was opened midway between the umbilicus and ensiform cartilage sufficiently to admit my index finger for exploratory purposes The characteristic hard, hobnail surface which was felt on reaching the liver left no further doubt as to the diagnosis and the parietal incision was extended from the ensiform cartilage to the umbilicus I then introduced my hand into the abdomen and projected my finger against the anterior parietes three inches above the pubes and made an opening sufficiently large there to admit a glass drain into the recto vesical pouch About two gallons of fluid escaped from the upper opening and through the tube Through the upper opening a perfect view of the liver and spleen was obtained The liver presented the typical appearance of the ordinary form of alcoholic cirrhosis and although diminished in size was not so much contracted as we expected it might be from the diminished liver dulness The spleen was enlarged to at least six times its normal size After emptying the peritoneal cavity and drying it with sponges, the anterior surface of the liver, the outer surface of the spleen, the exposed coils of intestine, and the parietal peritoneum were all firmly sponged and the omentum was attached by sutures widely to the parietal peritoneum lining the anterior abdominal wall as described in the paper to which I have referred above The whole of the upper wound was closed by deep and superficial sutures and the glass drainage tube was left projecting and firmly gripped below Wide, long strips of strapping were applied firmly over the dressing from the epigastrium down to the drainage-tube The nurse who was left in charge was directed to keep the dressing dry by frequently emptying the tube with a pump The operation was completed at 12 45 P M The after progress of the case was as follows Fluid was drawn off at 2 15 P M, at 2 45 P M, at 3 15 P M, at 3 45 P M, at 4 P M, at 4 30 P M, at 5 15 P M, at 6 10 P M, at 7 P M, at 7 40 P M, at 9 15 P M, at 10 15 P M, and at 12 midnight The total amount of fluid drawn off since the operation was 8 oz 4 dr On Jan 13th fluid was drawn off at 2 30 A M, at 4 30 A M, at 6 A M, at 7 40 A M, at 9 15 A M, at 10 40 A M, at 12 35 P M, and at 2 45 P M The total drawn off during the 24 hours was 6 oz 6 dr On the 15th fluid was drawn off at 6 15 A M, at 9 A M, at 1 30 P M, at 3 P M, at 10 P M, and at 12 midnight, and on the 16th at 1 A M, 3 A M, and at 6 30 A M The total for the 24 hours was 4 oz The wound was dressed for the first time on the 18th, when the glass tube was removed and a small indiarubber one was inserted On this day and on the 19th and 20th the dressing was frequently changed to keep the wound dry The wound was dry all the night of the 21st, and on the 26th the indiarubber tube was taken out The patient went home on the 28th with the wound healed except where the drainage tube had been

The general recovery of the patient requires no note From the surgical point of view it was straightforward It was, however, evident during the last few days of his stay in Newcastle that he was much depressed mentally and after his return home the depression increased and for three weeks he was alternately depressed and excited This feature seems to me to be deserving of more attention than would have been given to the same in an ordinary case, for it may possibly be one of the special risks of this operation. Dr Drummond has brought before the Northumberland and Durham Medical Society at various times cases of liver cirrhosis complicated by peculiar nervous symptoms, and in one patient who died he was unable to find any change in the nervous system to account for the symptoms In that case the liver was in an advanced stage of cirrhosis, there was no ascites, and there was a very large vein of Sappey connecting the portal with the systemic circulation The explanation given by Dr Drummond of the attacks—viz, that they were due to intestinal products finding their way directly into the systemic circulation without any liver influence being brought to bear on them—is in accordance with the fact that this patient was on several occasions rescued from an apparently hopeless coma by the administration of a brisk purgative and also with the results of experiments on the liver functions 10 months after the operation my patient was shown at a meeting of the Northumberland and Durham Medical Society He appeared then to be in excellent health and said that he felt perfectly well His spleen, though considerably less, was large enough to be easily felt There was no sign of fluid in the abdomen I next heard definitely of him in January, 1899 A well known insurance office wrote asking me to report on the nature of the operation performed two years previously He had been passed by the medical adviser of the company as a first-class life, but before completing the insurance I was consulted

The only difference between this operation and those previously recorded by me was in the position of the parietal incision The main opening in this case was made above the umbilicus and was only large enough to admit a drainage-tube below that point The importance of avoiding the chance of a ventral hernia will be seen later,

The patient in the first successful case, a woman attended the Medical Section at the annual meeting of the British Medical Association at Carlisle eight months after the operation and was then apparently in perfect health The abdominal cicatrix had yielded to some extent, producing a ventral hernia This was the result of a cough which had troubled her for some months and imperfect suturing, but the hernia occasioned no inconvenience and was kept in place by an abdominal belt Two years after the operation this patient called on me concerning her ventral hernia During this time she had felt strong and well, had led an active and happy life, and had performed all the duties of her household. Latterly a troublesome cough had led to a marked increase in the size of the hernia and her belt had ceased to be a sufficient support. She was anxious to have the hernia radically cured, and considering the trouble which it was causing, the certainty that it would get worse, and the

[1] Brit. Med. Jour, Sept. 19th, 1893.

oxæmia It is especially when the temperature reaches 41° and is maintained at that level for some hours that lesions analogous to the experimental ones are seen and these resemble those of the second experimental group

The accompanying figures represent the principal changes which I have observed in some of the cases which I have lately had an opportunity of examining, and for the clinical references in these I am indebted to Dr W Pasteur and Mr.

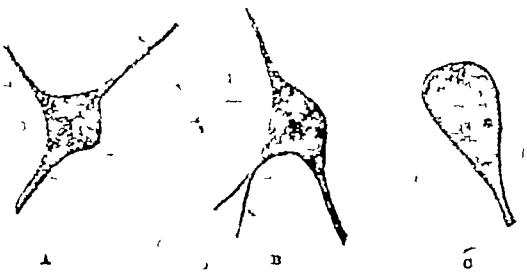
FIG 2

A representation of normal brain cells showing even staining with differentiation and regular distribution of chromatophile granules.

J Murray Fig 2 represents the appearance of two normal cells which stain evenly and show a regular distribution of chromatophile rods

Fig 3 shows the appearance of cells taken from cases of

FIG 3.

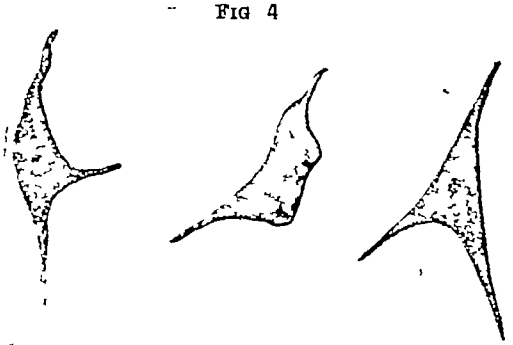


A B C

Appearance of cells from two cases of meningitis recently under the care of Dr W Pasteur. A and B are from a case of postero-basic meningitis with some hydrocephalus and moderate pyrexia in a child aged 14 months. C is from a case of chronic meningitis with marked hydrocephalus and subnormal temperature in a child aged one year The cells stained in patches of different intensity There was no differentiation of the chromatophile rods. The nucleus was absent or ill-defined. The nucleolus was sometimes displaced as in C.

meningitis with hydrocephalus A and B were from a child suffering from postero basic meningitis with some hydrocephalus and moderate pyrexia C was taken from a child,

FIG 4



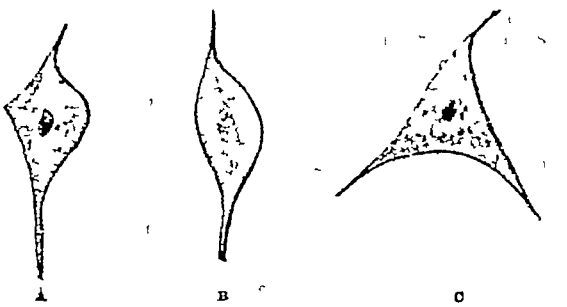
Appearance of cells from a case of septicæmia with high temperature (106° F) in a child, aged five years, recently under the care of Dr W Pasteur The cells stained deeply and diffusely presenting a plain dark blue appearance with no differentiation. The nucleus was ill-defined. The nucleolus was variable but as a rule was not altered.

aged one year who died from chronic meningitis accompanied by marked hydrocephalus The membranes of the brain were much thickened and firmly adherent to the brain substance The changes in the cells of this case were not so advanced as in the other and in this respect it was interesting to note that whereas in the other case there was moderate pyrexia, in this one the temperature was subnormal, or at the highest normal, throughout the disease The stain in these is distributed in patches of varying intensity, the chromatophile granules have lost their differentiation, the nucleus is not indicated, and in some cells (as in C) the nucleolus is displaced The cell A shows a dark band running across it which would seem to correspond with that mentioned above as described by Marinesco as a rare occurrence in his experimental hyperpyrexial cases

Fig 4 represents the cerebral cells of a child who died from acute septicæmia, there was a continuous high temperature for some days before death which occasionally reached 106° F Many of the cells were swollen and misshapen and they stained deeply and diffusely, presenting a plain dark blue appearance with no differentiation In some the axis cylinders were also swollen and deeply stained and the nuclei and in some cases the nucleoli were often invisible

Fig 5 shows cells from a fatal case of tetanus The chief

FIG 5



A B C

Cells from a case of tetanus recently under the care of Mr John Murray A and B from the motor area of the brain. C, from the anterior cornua of the spinal cord. The cells showed very extensive loss of staining substance and presented a spongy appearance on a white background the meshes of the spongework being stained a brownish colour by the methyl blue.

change is an extensive loss of colouring matter and the cells presented a spongy appearance with a white background which had a very striking effect but one which it is not very easy to reproduce This condition was present in the motor-area of the brain and the anterior cornua of the cord and to a less degree in the cerebellum

In these observations I have made special use of the valuable method of examining cells without the intervention of hardening reagents as described by J Turner[4] by which beautiful specimens can be obtained and many possibilities of artificial alterations are avoided But besides alterations which may be possibly produced in the preparation of specimens another fallacy—viz, that of post-mortem changes—has also to be carefully avoided and in order as far as possible to avoid these I made various control experiments by keeping pieces of brain under various conditions for different lengths of time, and in no cases was I able by the fresh method to produce any of the characteristic and definite changes which I have described above The cell body, however, is not the only part which is affected by disease and indeed in many cases it is probable that the earliest changes take place in the delicate protoplasmic terminations of the dendrons An interesting investigation has recently been made by Hamilton K Wright in this connexion on the action of potassium bromide, and this observer concluded that the power which this drug has of inhibiting the intellectual and motor processes depends upon its action on the ultimate terminals of the protoplasmic extensions, while the cell bodies only suffer after a more prolonged exposure to its influence It is to be hoped that further investigations in these directions may eventually lead to a more definite knowledge of the pathological conditions underlying many obscure diseases and so finally to their more effectual treatment

Queen Anne-street, W

[4] Journal of Mental Science, July, 1893 and Brain, Winter Number, 1897

ON THE STRUCTURE OF BRAIN-CELLS AND THEIR DEGENERATION IN GENERAL DISEASES[1]

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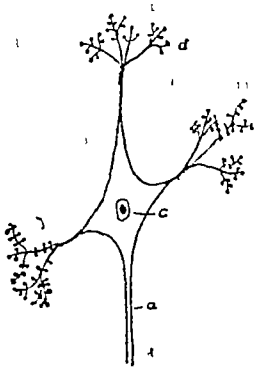
A TYPICAL brain-cell consists of a cell body together with its various prolongations These prolongations are of two kinds—(1) short branches which ramify around the cell and carry impulses to it, and (2) one (sometimes more) long branch which carries the impulse from the cell towards its destination The short branches are called dendrons, the long one is called the axon, and the cell body, together with its dendrons and axon, is known as a neuron (Fig 1) The

FIG 1



Diagrammatic representation of a neuron. A, Axon. D Dendrons. C, Cell body

method of staining nervous tissues by silver salts, which was first introduced by Golgi, has shown that each neuron is an anatomical unit—i e, its branches are in contiguity but never in actual continuity with those of neighbouring cells Such an important discovery naturally greatly altered the ideas which were generally held concerning the modes of action of the nervous system, for it was formerly thought that the branches all joined with each other to form a complete network along which impulses freely passed, choosing their paths according to the different resistances which they encountered The independence of the neurons explains clearly how secondary degenerations are limited For example, the motor system is made up of two sets of neurons, an upper and a lower, the upper neuron has its cell body in the cerebral cortex and thence the axon travels downwards until it ultimately terminates by fine branches in the anterior cornua of the spinal cord The lower neuron has its cell body and dendrons situated in the anterior cornua of the cord, while its axon makes its way outwards to convey the motor impulses to the muscles Now according to the old idea the terminal fibres of the upper neuron were directly continuous with the dendrons of the lower neuron and therefore it was difficult to explain why, as a rule, degenerations of the upper did not spread into those of the lower since they were continuous, on the other hand, if we are right in believing as we now do that they are not continuous the degeneration of the one would naturally not spread to the other but would become arrested when its own limits were reached

The axon is the chief prolongation of the cell body, it usually arises by a conical stem, becomes medullated, generally runs a long course and does not branch until it has nearly reached its termination Some fine fibres, however, called collaterals sometimes spring at right angles from it during its course, but these can only be traced for a short distance and their termination is at present uncertain

The dendrons are fine protoplasmic processes which rapidly branch after leaving the cell body, and their branches are covered by minute processes which terminate in little varicosities These were first described by Ramon y Cajal and were for some time thought to be artificial products brought about by the method of staining, but their regular and unvarying distribution together with the fact that they have been observed with other stains besides the silver one makes it probable that they are in reality a part of the cell A good deal of importance has been attached to these little processes and their bead like extremities are thought by many to be the means by which the nerve impulses are received from the corresponding processes of neighbouring cells Stefanowska[2] found that these processes are not present in the mouse at the time of birth, but are gradually developed from 10 to 15 days afterwards The function of the dendrons is doubtless one of conduction and in some cases it has been stated that fibrils have been actually traced from the dendron through the cell body to become continuous with those of the axon, if this proves to be generally true it will go far to show that a nerve impulse has its origin in the extremities of the dendrons and not in the cell body itself

The cell body varies very much in shape and its structure can be studied by staining it with methylene blue after the method of Nissl When treated in this way the cell body is found to consist of two substances—one which stains and another which does not The chromatic or staining substance is usually arranged more or less regularly in rods or cubes, but the appearance may vary a little according to the methods by which the specimens are prepared The achromatic substance forms the framework and is probably concerned with the conduction of impulses across the cell body Opinions are a good deal divided as to the importance of the chromatic substance, or chromatophile granules as they are often termed Van Gehuchten considers it is one of the principal constituents of the cell, forming a reserve substance which accumulates during rest and diminishes during functional activity, and Lugaro also supports this view There is usually a very distinct nucleolus in the cell body which stains deeply and this is surrounded by a lighter zone which represents the nucleus Many of the cells contain a quantity of pigment, but the significance of this is not determined, for while some think it a sign of degeneration others ascribe it to activity. Whatever the uses of the separate constituents of the cell body may be its chief function as a whole is one of nutrition, for whenever any of its processes are cut off from it they always die

Pathological changes have been observed in the cell body and its processes both in mental and general diseases and I can confirm some of the changes which take place in the latter from my own observations The principal changes which have been observed in the cell body are alterations in the quantity and distribution of the chromatophile substance and the two conditions which seem to favour this are toxæmia and a high temperature In man it is usual to find these two conditions existing together, but in animals the one may be experimentally obtained without the other, and according to Marinesco the effects produced are distinctly different in the two cases Marinesco[3] has studied the changes which take place in the cells of the central nervous system after an animal has been exposed to high temperatures and he has described three stages of degeneration which he thinks may be recognised The earliest lesion consists of a circular and segmentary distribution of the chromatophile elements; next the cell body becomes swollen, stains diffusely, and the granulations cannot be separately defined, while the third stage is characterised by a still greater accentuation of these appearances—i.e, great opacity of the cell body which is often most dense round the neighbourhood of the nucleus but at other times occurs over other parts of the cell. More rarely there were dark bands running across the cell which were often zigzag in shape These three degrees naturally pass imperceptibly into one another without any definite line of demarcation Marinesco concludes from his experimental work that a temperature lower than 40° C, even when prolonged several days, does not seem to produce lesions like those determined by experimental hyperpyrexia and that in infectious febrile states when the temperature has exceeded 40° lesions can be recognised which do not always correspond to hyperpyrexial ones and these are doubtless produced by

[1] An abstract of a paper read before the Middlesex Hospital Medical Society

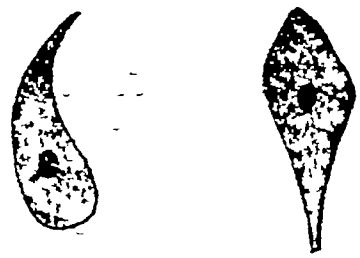
[2] Annales de la Société Royale des Sciences Médicales et Naturelles de Bruxelles, tome vi. 1897

[3] Revue Neurologique, 1899, p. 5

toxæmia It is especially when the temperature reaches 41° and is maintained at that level for some hours that lesions analogous to the experimental ones are seen and these resemble those of the second experimental group

The accompanying figures represent the principal changes which I have observed in some of the cases which I have lately had an opportunity of examining, and for the clinical references in these I am indebted to Dr W Pasteur and Mr

FIG 2.

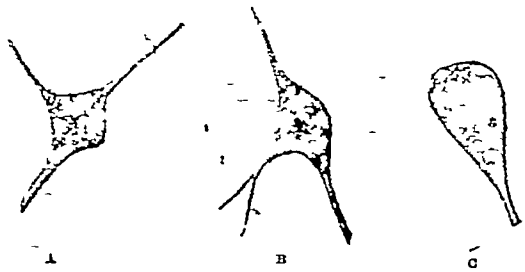


A representation of normal brain cells showing even staining with differentiation and regular distribution of chromatophile granules.

J Murray Fig 2 represents the appearance of two normal cells which stain evenly and show a regular distribution of chromatophile rods

Fig 3 shows the appearance of cells taken from cases of

FIG 3.

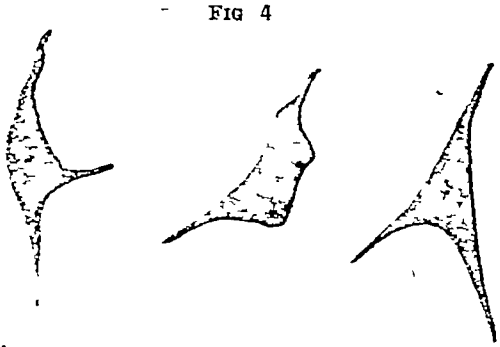


A B C

Appearance of cells from two cases of meningitis recently under the care of Dr W Pasteur. A and B are from a case of postero-basic meningitis with some hydrocephalus and modera e pyrexia in a child aged 14 months. C is from a case of chronic meningitis with marked hydrocephalus and subnormal temperature in a child aged one year The cells stained in patches of different intensity There was no differentiation of the chromatophile rods. The nucleus was absent or ill-defined. The nucleolus was sometimes displaced as in C.

meningitis with hydrocephalus A and B were from a child suffering from postero-basic meningitis with some hydrocephalus and moderate pyrexia C was taken from a child,

FIG 4



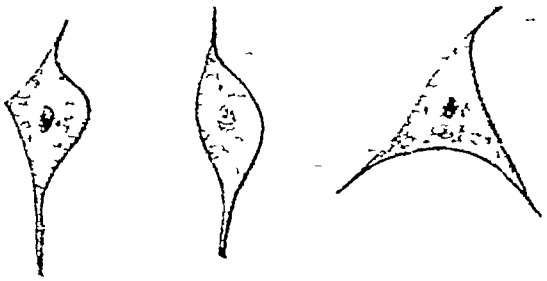
Appearance of cells from a case of septicæmia with high temperature (106° F) in a child, aged five years, recently under the care o Dr W Pasteur The cells stained deeply and diffusely presenting a plain dark-blue appearance with no differentiation. The nucleus was ill-defined. The nucleolus was variable but as a rule was not altered.

aged one year who died from chronic meningitis accompanied by marked hydrocephalus The membranes of the brain were much thickened and firmly adherent to the brain substance. The changes in the cells of this case were not so advanced as in the other and in this respect it was interesting to note that whereas in the other case there was moderate pyrexia, in this one the temperature was subnormal, or at the highest normal, throughout the disease The stain in these is distributed in patches of varying intensity, the chromatophile granules have lost their differentiation, the nucleus is not indicated, and in some cells (as in C) the nucleolus is displaced The cell A shows a dark band running across it which would seem to correspond with that mentioned above as described by Mannesco as a rare occurrence in his experimental hyperpyrexial cases

Fig 4 represents the cerebral cells of a child who died from acute septicæmia, there was a continuous high temperature for some days before death which occasionally reached 106° F Many of the cells were swollen and misshapen and they stained deeply and diffusely, presenting a plain dark blue appearance with no differentiation. In some the axis cylinders were also swollen and deeply stained and the nuclei and in some cases the nucleoli were often invisible

Fig 5 shows cells from a fatal case of tetanus The chief

FIG 5



A B C

Cells from a case of tetanus recently under the care of Mr John Murray A and B from the motor area of the brain. C, from the anterior cornua of the spinal cord. The cells showed very extensive loss of staining substance and presented a spongy appearance on a white background the meshes of the spongework being stained a brownish colour by the methyl blue.

change is an extensive loss of colouring matter and the cells presented a spongy appearance with a white background which had a very striking effect but one which it is not very easy to reproduce. This condition was present in the motor area of the brain and the anterior cornua of the cord and to a less degree in the cerebellum

In these observations I have made special use of the valuable method of examining cells without the intervention of hardening reagents as described by J Turner[1] by which beautiful specimens can be obtained and many possibilities of artificial alterations are avoided But besides alterations which may be possibly produced in the preparation of specimens another fallacy—viz, that of post-mortem changes—has also to be carefully avoided and in order as far as possible to avoid these I made various control experiments by keeping pieces of brain under various conditions for different lengths of time, and in no cases was I able by the fresh method to produce any of the characteristic and definite changes which I have described above The cell body, however, is not the only part which is affected by disease and indeed in many cases it is probable that the earliest changes take place in the delicate protoplasmic terminations of the dendrons An interesting investigation has recently been made by Hamilton K Wright in this connexion on the action of potassium bromide, and this observer concluded that the power which this drug has of inhibiting the intellectual and motor processes depends upon its action on the ultimate terminals of the protoplasmic extensions, while the cell bodies only suffer after a more prolonged exposure to its influence. It is to be hoped that further investigations in these directions may eventually lead to a more definite knowledge of the pathological conditions underlying many obscure diseases and so finally to their more effectual treatment

Queen Anne-street, W

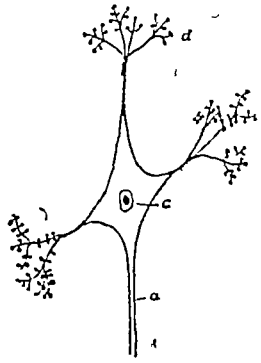
[1] Journal of Mental Science, July 1893, and Brain, Winter Number, 1897

ON THE STRUCTURE OF BRAIN CELLS AND THEIR DEGENERATION IN GENERAL DISEASES[1]

BY H CAMPBELL THOMSON, M D, M R C P LOND,
PHYSICIAN TO OUT-PATIENTS TO THE HOSPITAL FOR EPILEPSY AND PARALYSIS, REGENT'S PARK PATHOLOGIST AND CURATOR OF THE MUSEUM TO THE MIDDLESEX HOSPITAL.

A TYPICAL brain cell consists of a cell body together with its various prolongations These prolongations are of two kinds—(1) short branches which ramify around the cell and carry impulses to it, and (2) one (sometimes more) long branch which carries the impulse from the cell towards its destination The short branches are called dendrons, the long one is called the axon, and the cell body, together with its dendrons and axon, is known as a neuron (Fig 1) The

FIG 1



Diagrammatic representation of a neuron. A, Axon D Dendrons. C, Cell body

method of staining nervous tissues by silver salts, which was first introduced by Golgi, has shown that each neuron is an anatomical unit—i e, its branches are in contiguity but never in actual continuity with those of neighbouring cells Such an important discovery naturally greatly altered the ideas which were generally held concerning the modes of action of the nervous system, for it was formerly thought that the branches all joined with each other to form a complete network along which impulses freely passed, choosing their paths according to the different resistances which they encountered The independence of the neurons explains clearly how secondary degenerations are limited For example, the motor system is made up of two sets of neurons, an upper and a lower, the upper neuron has its cell body in the cerebral cortex and thence the axon travels downwards until it ultimately terminates by fine branches in the anterior cornua of the spinal cord The lower neuron has its cell body and dendrons situated in the anterior cornua of the cord, while its axon makes its way outwards to convey the motor impulses to the muscles Now according to the old idea the terminal fibres of the upper neuron were directly continuous with the dendrons of the lower neuron and therefore it was difficult to explain why, as a rule, degenerations of the upper did not spread into those of the lower since they were continuous, on the other hand, if we are right in believing as we now do that they are not continuous the degeneration of the one would naturally not spread to the other but would become arrested when its own limits were reached

The axon is the chief prolongation of the cell body, it usually arises by a conical stem, becomes medullated, generally runs a long course and does not branch until it has nearly reached its termination Some fine fibres, however, called collaterals sometimes spring at right angles from it during its course, but these can only be traced for a short distance and their termination is at present uncertain

The dendrons are fine protoplasmic processes which rapidly branch after leaving the cell body, and their branches are covered by minute processes which terminate in little varicosities These were first described by Ramon y Cajal and were for some time thought to be artificial products brought about by the method of staining, but their regular and unvarying distribution together with the fact that they have been observed with other stains besides the silver one makes it probable that they are in reality a part of the cell A good deal of importance has been attached to these little processes and their bead like extremities are thought by many to be the means by which the nerve impulses are received from the corresponding processes of neighbouring cells Stefanowska[2] found that these processes are not present in the mouse at the time of birth, but are gradually developed from 10 to 15 days afterwards The function of the dendrons is doubtless one of conduction and in some cases it has been stated that fibrils have been actually traced from the dendron through the cell body to become continuous with those of the axon, if this proves to be generally true it will go far to show that a nerve impulse has its origin in the extremities of the dendrons and not in the cell body itself

The cell body varies very much in shape and its structure can be studied by staining it with methylene blue after the method of Nissl When treated in this way the cell body is found to consist of two substances—one which stains and another which does not The chromatic or staining substance is usually arranged more or less regularly in rods or cubes, but the appearance may vary a little according to the methods by which the specimens are prepared The achromatic substance forms the framework and is probably concerned with the conduction of impulses across the cell body Opinions are a good deal divided as to the importance of the chromatic substance, or chromatophile granules as they are often termed Van Gehuchten considers it is one of the principal constituents of the cell, forming a reserve substance which accumulates during rest and diminishes during functional activity, and Lugaro also supports this view There is usually a very distinct nucleolus in the cell body which stains deeply and this is surrounded by a lighter zone which represents the nucleus Many of the cells contain a quantity of pigment, but the significance of this is not determined, for while some think it a sign of degeneration others ascribe it to activity Whatever the uses of the separate constituents of the cell body may be its chief function as a whole is one of nutrition, for whenever any of its processes are cut off from it they always die

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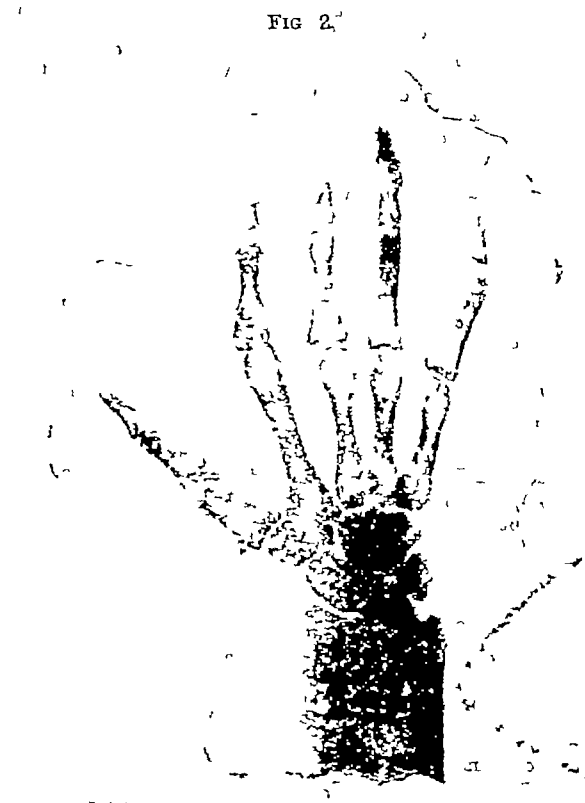
[2] Annales de la Société Royale des Sciences Médicales et Naturelles de Bruxelles, tome vi. 1897

[3] Revue Neurologique 1899, p. 5

FIG 1.

Right hand, palm down. 10 in. coll. Exposure 20 seconds.

FIG 2.



Left hand palm down. 10 in. coll. Exposure 20 seconds

the irregular development had occurred and who shared it with her father and her father's cousin whose hands were described as being exactly similar The deformity appeared to be as I described it and as the illustration indicated, the ring finger being the only one fully developed on either hand, the remainder being unequally grown The condition is symmetrical. My description, however, seems to have been as unconvincing as the illustration and in at least one book (Mr Tubby's, for example) the case is described as one of overgrowth of the ring finger, the implication being that the other fingers are normal Mr Tubby borrowed and copied my illustration but reversed my description I have been at some pains to trace the girl in order to see what is the exact condition by a skiagram and Miss Knight of the Park lane Day Industrial Schools here, where the girl formerly attended, has been good enough to find her to enable me to get the accompanying excellent skiagrams which I owe to Mr Thurstan Holland

The condition disclosed is remarkable It will be seen that the thumb and ring finger of each hand are apparently the only properly developed digits The second phalanges of the first, second, and fourth fingers are abortive It would appear that the epiphyses in the first phalanges of the first and second fingers are larger than usual, but I do not quite know how to describe the condition otherwise—the girl is now in her eighteenth year I am disposed to accept the opinion of Mr Douglas Crawford that when the terminal joint was formed there was no complete division of the cartilage and that the nutrient supply in consequence suffered I think we may take it that the condition is symmetrical, though it is not so obvious in the left index finger as in that of the right hand The hands seem normal in other respects, as is the girl except for some deflection of the nasal septum to the left

Liverpool.

DISLOCATION OF THE CARPUS WITH THE HAND BACKWARDS

By JOHN ELLIOT, L R C P & S EDIN, L F P S GLASG,
ASSISTANT MEDICAL OFFICER TO THE BOROUGH OF PORTSMOUTH ASYLUM.

ON March 18th, 1899, an ill nourished, feeble woman, aged 64 years, suffering from melancholia with considerable mental enfeeblement, was seized by both hands by a maniacal patient, was swung violently round, and was thrown

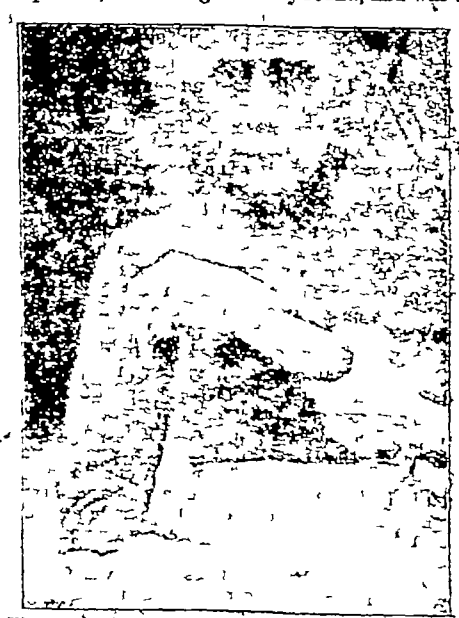


Illustration showing backward displacement of hand and carpus.

to the ground She fell backwards, throwing out the left hand to save herself, and the palm came in sharp contact with the floor The nurse in charge saw that there was some deformity of the wrist and sent word of the occurrence to me. I found the patient sitting on a bed in the dormitory

ECLAMPSIA, INDUCTION OF PREMATURE LABOUR, RECOVERY

BY W ORESWELL HOWLE, L S A LOND

I THINK that the following case is worth recording because of the recent correspondence on this subject and the almost immediate relief after the birth of the child

On March 4th, 1899, I was called to a woman whom I found to be suffering from a well marked eclamptic seizure I learned from the friends that she was eight months pregnant with her first child and that her age was 25 years There was no family history of convulsions and the patient had never had a "fit" before On the previous day she had suffered from epigastric and lumbar pain, there had been no eye symptoms, headache, or vomiting At 9 P M she was suddenly seized with a convulsion which was followed by unconsciousness Between 9 P M and 4 A M on March 5th she had four "fits" and was insensible the whole time

On examination I found the temperature to be 103° F The tongue was nearly bitten through and there were profuse frothy discharge from the mouth, great cyanosis, sweating, œdema of the legs, and a good deal of pulmonary œdema I immediately administered chloroform and continued for half an hour during which time she had three convulsions and an involuntary discharge of urine and fæces The pulse was 120, small, very feeble, irregular, and compressible 10 minims of tincture of veratrum viride were given hypodermically and the pulse rate dropped to 110 per minute After consultation with Mr Pooler, deeming delay dangerous, we decided to empty the uterus as quickly as possible under chloroform The os was tightly closed The position was right occipito-anterior The pelvic diameters, though no pelvimeter was used, were considered to be normal We decided upon manual dilatation In 65 minutes we had dilated sufficiently to introduce the hand Version was performed and delivery was rapidly effected, this method being quicker than extraction by forceps, time being all important The child, a male with one testicle descended, was stillborn and weighed five and a half pounds There was very little liquor amnii 1/10 gr of citrate of ergotinin was now given hypodermically and the placenta was expressed by Crédé's method The uterus was washed out with one in 60 carbolic solution and contraction was well maintained There was very slight post-partum hæmorrhage, the blood being dark coloured and slow to coagulate The condition of the patient was now somewhat improved The temperature was 103° and the pulse was 100, regular, not so compressible, but still small and weak The cyanosis was not so marked and there was no recurrence of the convulsions but the insensibility was profound A quarter of a minim of croton oil in sugar of milk was administered on the tongue By 8 A M, or two hours after the birth of the child the cyanosis had entirely disappeared The pulse was 96, of better quality, and we considered it safe to leave the patient At 3 P M there had been no more convulsions The pulse was 96 and the temperature was 99° The patient was still unconscious There was no post-partum hæmorrhage At 8 P M there was a slight return of consciousness A voluntary discharge of urine took place, being eight ounces in quantity and dirty white in colour, its specific gravity was 1030 and it contained 3 per cent of urea, 12 parts per 1000 of dried albumin measured by Esbach's albuminometer, no sugar, but blood cells, epithelium, epithelial and hyaline casts, and urates A mixture containing 10 minims of tincture of veratrum viride and five grains of hydrate of chloral was given hourly During the following 24 hours the patient gradually recovered consciousness but had no memory of events later than eight days before the onset of the convulsions She had no convulsions She passed 20 ounces of urine of specific gravity 1030 and containing urea (2 per cent), urates, and dried albumin (two parts per 1000), no casts or cells were seen A saline aperient was given and continued every four hours A strictly milk diet was ordered The progress since has been steady, there have been no more convulsions, the albumin has gradually disappeared, the quantity of urine has gradually increased, and the memory has returned The patient left her bed on the fourteenth day and the convalescence has been uninterrupted

This is a comparatively frequent complication of pregnancy Statistics vary from Auvard's[1] three in 1000 to those of the Philadelphia Board of Health, one in 170, but the affection is of such a serious nature that every case seems worthy of record The percentage of deaths is estimated at between 50 (Pajot) and 30 (Kaltenbach). All observers agree that the primipara is much more liable to this condition, and plural births especially predispose to it, the above case being an exception The extreme rigidity of the os in this case under profound anæsthesia was remarkable, remembering that the tendency of eclampsia is to expel the uterine contents With a group of symptoms including high temperature, great cyanosis, profuse discharge from the mouth, profound stupor, and pulmonary œdema authorities[2] tell us to expect a fatal termination, and the rapid improvement after emptying the uterus was most gratifying, though after this has been done the convulsions cease

The tincture of veratrum viride introduced by Dr Baker of Eufaula, Alabama,[3] and revived by Dr J Squibb[4] is of undoubted use because of its effect on the circulation and it is well to remember that it takes half an hour to act Numerous observations on the use of this drug have been recorded[7] lately and it has become a very valuable addition to our pharmacopœia

Birmingham

[1] Traite Pratique d Accouchements.

[2] Statistics of the Philadelphian Hospital 1874–89

[3] Ueber Eklampsie (Sammlung Klinischer Vorträge) No 39

[4] Archiv für Gynäkologie.

[5] Southern Medical and Surgical Journal, 1889

[6] Medical Record, Dec. 6th 1896

[7] THE LANCET, Jan. 15th, 1900

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF COMPLETE OCCLUSION OF THE OS UTERI

BY T W PARKINSON, M B, C M EDIN, D P H ABERD.

ON May 2nd, 1899, I attended a woman, aged 43 years, a primipara, who had been in labour about six hours when I arrived The pains were almost constant, not permitting of any uterine relaxation the whole time during which I remained with her She complained very much of a tearing pain in the region of the bladder Upon examination I found the vulva to be a good deal swollen, the vagina hard and dry, and the perineum very thick and rigid I found the head presenting but entirely covered by the distended cervix. I could find no os uteri, but this did not surprise me as I concluded that it was too high to reach I was very much struck, however, by the dryness of all the parts and by the head being so low without dilatation of the os uteri. In three hours I returned and found the bulging head lower but no os uteri The pain in the lower part of the anterior abdominal wall was now unbearable Under chloroform I made a thorough examination and found complete occlusion of the os uteri with just the smallest of dimples to indicate its position I relaxed the chloroform and permitted the pains to begin again and as soon as the cervix became tense over the presenting part I forced my finger with a sharp nail through the cervix and afterwards through the membranes The water escaped and the pain stopped for half an hour There was a good deal of bleeding The rupture through the cervix took a somewhat triangular shape As soon as the pains began again the artificial os uteri dilated rapidly and I delivered with forceps as the patient was much exhausted She made a good recovery and is now quite well

Brechin.

A CASE OF UNEQUAL GROWTH OF FINGERS

BY G A HAWKINS-AMBLER, F R C S EDIN,
DEMONSTRATOR OF ANATOMY AT UNIVERSITY COLLEGE, HONORARY SURGEON TO THE SAMARITAN HOSPITAL FOR WOMEN AND ASSISTANT SURGEON TO THE STANLEY HOSPITAL, LIVERPOOL.

IN THE LANCET of Feb 4th, 1893, I published a note on this case, which was illustrated by an engraving (taken from a photograph) of the hands of a young girl in whom

brain which necessarily proved fatal That such injuries had occurred was considered very probable before the operation was performed It was thought right to undertake it, however, because it was impossible to be sure what amount of damage the brain had in reality sustained In both cases the middle meningeal artery was at once seen on the surface of the dura mater In Case 2 after the vessel had given way and the end had been lost sight of bleeding was arrested by the strips of gauze which were introduced. In any case in which the orifice of the vessel could not be reached bleeding no doubt could be stopped by this method It is obviously fortunate that as a rule, as these and other recorded cases show, the artery leaves its groove in the bone and is to be found on the dura mater where it can be secured without much difficulty

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

The Marshall Hall Lecture

A MEETING of this society was held on May 23rd, the President, Mr BRYANT, being in the chair

Professor SHERRINGTON delivered the Marshall Hall Lecture, taking for his subject "The Spinal Animal" After some introductory remarks he said that the total function of the nervous system was by physiological analysis resolved into reflex actions. If the segmental theory of the spinal cord, therefore, meant anything it meant that the reflex spinal arcs were gathered together into groups, one for each metamere, the arcs composing each single group being functionally more closely connected one with another than the arcs of one group with those of another This was the view which Mayo and Legallois introduced and it was insisted on by Marshall Hall It drew some of its most trenchant support from invertebrate physiology Thus, when a scorpion was bisected the individual segments showed automatic movements, the hind part often running over the head. In the limulus if the brain were removed the respiratory movements continued and if the ganglia associated with individual segments were disconnected respiratory movements continued in each segment, though not synchronously If all the central nervous system of a frog except the brachial enlargement were destroyed the sexual clasp continued and in monkeys if only the tip of the spinal cord were left in relation with the sacral nerves wagging movements of the tail could be elicited. In human physiology the segmental theory had hardly been more than a figure of speech owing probably to the increased attention bestowed on localisation of functions of the brain The basis of each spinal segment was two groups of cells, afferent and efferent. The "afferent" cells lay in the posterior root ganglion while the efferent were in the cord The afferent cells were of three classes—cutaneous, visceral, and muscular The cutaneous distribution was of zonal type, lapping round one lateral half of the body in its own metamere The distribution of skin fields connected with adjacent segments, however, overlapped greatly, as was shown by Professor Sherrington's observations on the monkey In the limbs the sensory skin fields radiated from axial lines along the limb which corresponded with lines seen in certain animals with skin marking such as tigers and zebras, and they were probably not any more hypothetical than the dorsal and ventral mid lines of the body itself The distribution of the visceral fibres was a very difficult question The ramus communicans was probably the visceral and vascular spinal nerve Head, studying the localisation of pain and of patches of cutaneous tenderness associated with visceral affections, had shown that they had a surface distribution not agreeing with the distribution of sensory nerves but segmental and showing a scheme harmonious with that which Professor Sherrington showed to hold good in connexion with the cutaneous distribution of the root ganglia. The experimental investigation of the viscera for signs of afferent nerves had yielded curiously few data. The surgeon knew the insentiency of the viscera The gall bladder could be incised without the patient feeling it, but everyone knew the intensity of the pain of biliary colic The faradaic current could be applied to the collapsed intestine without causing any evidence of sensation or reflex action, but Professor Sherrington had found that if the intestine, ureter, or gall-bladder were distended with fluid reflexes were produced the reflexes not being affected by section of the vagus Each organ was supplied from many roots The existence of afferent muscular cells had been proved, the fibres coming from the muscle spindles which had been recently investigated by Dr F E Batten. Speaking of the distribution of the motor cells of the muscles, Professor Sherrington said that in the trunk region this was semi zonal, as seen in the intercostal muscles; in the limbs it was ray like, the ray extending from the mid line of the body out into the limb, the front rays being shorter than the posterior rays Each root supplied many muscles and a single muscle in most cases received a multiple nerve supply Professor Sherrington had found that the afferent fibres of the muscle always entered the ganglia of those posterior roots whose motor roots supplied the muscle. This had been worked out especially in connexion with the knee-jerk. The motor root cells of each segment although not grouped as definitely as the ganglionic mass of afferent cells on the posterior root were shown to be of accurate and similar local distribution. A local inflammation of the ventral horn might as accurately constitute a segmental affection as did inflammation of a spinal ganglion. Overlapping, however, which had been shown to complicate the investigation of sensory nerves also complicated that of motor supply So also in the visceral efferent roots, the little iris muscle, for example, having an overlapping distribution involving the first, second, and third thoracic roots So also there was much fusion between the segments of the cord themselves which had become so welded as to form a physiological integer in some respects This functional fusion was greatest in a longitudinal direction, there being some barrier preventing slight impulses from passing across the middle line Regarding the skin organs, in the spinal animal, as judged objectively by its movements, the field of the skin possessed certain foci of pre-eminent delicacy comparable in a way to the yellow spot region of the field of vision. These were the palm, the sole, the tip of the ear, the penneum, and the tip of the tail The interpretation of the reflexes usually given was that the movement was a protective one—the drawing up of the foot out of harm's way—but Professor Sherrington thought that the movement was more likely a piece of a great reflex of progression which the bulbo-spinal animal possessed. In Professor Sherrington's opinion one of the most instructive aspects of the spinal animal was in regard to muscular sense This was a sense which did not lie open to introspection. For example, flexion of the fingers was perceived but an individual had no consciousness that the muscles of the ventral side of the forearm were contracting There was evidence that the muscular sense-organs played a most important part in spinal sub-conscious reflex actions Thus, if an amphioxus were divided into three segments each of the segments would swim and right itself if inverted. The cricket stands after removal of its head, and a severed ray of a starfish will correct its position. The reflex movements associated with a segment usually concerned only that particular part of the body Many of them had to do with keeping the part clean as seen in the movements of the palps of crayfish and the elevation of the tail during defaecation in higher animals An exception in which reflex action was for the benefit of the whole individual was seen in the crab, in which if the leg were suddenly stretched by a weight the limb was detached, the detachment being due to the sudden contraction of a muscle which ruptured one of the basal joints. Lastly, Professor Sherrington referred very briefly to spinal shock. If the cord were cut across in a monkey there was profound paralysis of the skeletal muscles, greater even than that resulting from deep anaesthesia with chloroform. This did not occur in the simpler forms of animal life. The visceral muscles, however (bladder, rectum, &c) were not more affected in the monkey than in the frog Possibly this was due to the fact that in the higher animals the projection sense-organs (the eye, the ear, &c.) were acquiring greater and greater dominance over the skeletal musculature, although not over the visceral musculature, and that the shock and the profound paralysis were due to the sudden cutting off of connexions with these higher sense-organs.

supporting the injured hand on her lap and alternately flexing and extending the hand and fingers as if testing their movements. The appearance of the injury is seen in the accompanying illustration. On the back of the wrist just above the joint a prominence was formed by the displaced carpal bones which had slipped up over the posterior surfaces of the radius and ulna. On the palmar surface the ends of the bones of the forearm were prominent, the projecting styloid process of the ulna being distinctly seen. The relative positions of the two styloid processes were unaltered. The palm of the hand was shortened. Movements in the wrist were manifestly diminished but the fingers moved freely.

Reduction by extension and some pressure over the carpus was very easy; but on removing the force the bones slipped back again to their abnormal position and it was after this second dislocation that the photograph was taken. After manual reduction ordinary anterior and posterior splints were applied with a pad of lint over the dorsum of the wrist. The interest of the case lies in the fact that considering the age of the patient and the nature of the injury the result was dislocation and not Colles's fracture.

Lancet.

A Clinic

on

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem res alia per se est necessaria, nec quamquamque et medicorum et disciplinarum historia, tam abunde suum propria utilitate nobis esse videtur quam medicina.—Marcellus Donatus, De Hist. et Laud. Med., lib. iv. Proœmium.

ST BARTHOLOMEW'S HOSPITAL.

TWO CASES IN WHICH FRACTURE OF THE SKULL WAS COMPLICATED BY LACERATION OF THE MIDDLE MENINGEAL ARTERY AND IN WHICH THE VESSEL WAS LIGATURED.

(Under the care of Mr. Howard Marsh.)

In both the cases recorded below the time of onset of unconsciousness after injury to the head was typical of meningeal hæmorrhage, for in each there was a clear interval of consciousness between the infliction of the injury and the coma. Although in the second case death ultimately resulted the trepanning was clearly indicated by the symptoms which were present. The difficulty met with in the first case in replacing the bone which had been removed is certainly very unusual. The prognosis in these cases of extra-dural hæmorrhage is generally very doubtful, for it is rarely possible for the surgeon to feel sure that the lesion is not fractured or the brain itself much damaged.

CASE 1.—A man, aged 32 years, having been knocked down by a van in the street at 9 A.M. on Jan. 2nd, was taken in once to St Bartholomew's Hospital. No details of the accident could be obtained. On his arrival he was perfectly conscious, professed his ability to walk, and was anxious to return home, but he was not allowed to do so. He had a superficial scalp-wound over the right parietal eminence and there was bleeding from the right ear. At 9 P.M. he began to be drowsy and gradually became unconscious. There also developed complete paralysis of the left arm and leg and right side of the face, so that the mouth was pulled one way and squinting. The pulse went down to 39 and the breathing approached the Cheyne-Stokes type. The right pupil was widely dilated. On reaching the hospital Mr. Marsh found the patient apparently dying. As quickly as possible a large flap was raised and the skull was exposed in the right temporal fossa. It was then seen that there was a linear fracture traversing this area obliquely from below upwards and backwards, and so placed that it crossed the anterior inferior angle of the parietal bone. A large trephine was applied with its centre one and a half inches behind the external auditory process and the same distance above the zygoma. Through the opening thus formed a large extra-dural blood-clot was exposed. This clot was about two and a half inches thick at its centre and about four inches across, was removed with the finger and a large Volkmann's spoon. It could then be seen that the dura mater had been separated from the skull and forced inwards with the brain for at least three inches over a considerable area, so that a cavity was formed large enough to hold about eight ounces. The middle meningeal artery had been torn from its groove in the parietal bone and carried inwards with the dura mater. The vessel was ruptured and free bleeding was still taking place from its proximal end. In consequence of the wide separation of the dura mater and the depth from the surface at which it lay the bleeding artery could not be tied until more room had been obtained by enlarging the trephine opening. It was then, however, easily seized with clip forceps and tied with fine silk. The bone removed could not be replaced in the trephine opening for the dura mater having been so much depressed by the blood-clot there was nothing on which, whether while it was entire or when it had been cut into fragments (the method, apparently by which necrosis is most likely to be prevented) it could have rested. The scalp-wound was closed except at its centre. No drainage tube was used. Soon after the operation the pulse rose to 130. During the night there was a considerable discharge of what seemed to be cerebro-spinal fluid from the wound, though at the time of the operation no laceration of the dura mater was observed. This continued for three days. On the day following the operation the patient had regained consciousness but was so restless that a hypodermic injection of morphia one-fifth of a grain was given. This acted very favourably and was afterwards once or twice repeated. Movement was regained in the left leg on the fifth day after the accident; in the arm movement began to return only on the thirteenth day. The patient completely recovered and was discharged from the hospital at the end of a month.

CASE 2.—A man, aged 28 years, was struck on the head by a large block of wood which fell from a crane beneath which he was standing. On his admission into St. Bartholomew's Hospital no fracture of the vault of the skull could be detected, but there was free bleeding from the nose and into the pharynx. The patient was dazed and very restless. Soon afterwards swelling from extravasation of blood appeared on the left side of the head in the temporal region and he became unconscious. It was decided that although in all probability there was fracture of the base of the skull extending upwards into the temporal region, an exploratory operation ought to be undertaken. When the skull in the temporal region had been exposed a comminuted fracture was discovered traversing the parietal, and the squamous portion of the temporal bone. When a crown of bone had been removed with a large trephine an extensive extra-dural blood-clot was found and when this had been cleared away the middle meningeal artery was seen lying on the surface of the dura mater and still bleeding from its proximal end. During an attempt to place a ligature round it the vessel gave way and became retracted beyond reach. Hæmorrhage however, was easily arrested by gently plugging the space between the bone and the dura mater with sterilised gauze. During the operation it was noticed that bleeding was still going on into the pharynx. The patient gradually sank and died the same evening. Post-mortem examination disclosed an extensive fracture of the middle fossa of the skull reaching up into the temporal region and wide laceration of the brain.

Remarks by Mr. Marsh.—Cases of ligature of the middle meningeal artery are not very rare, yet these two examples which occurred within a few weeks of each other may be worthy of a brief notice as they illustrate the different conditions under which the operation may have to be performed and the wide difference in the result which may, under different circumstances, be met with. In Case 1 it seems probable that the patient had sustained a fracture of the base of the skull, for the fracture in the temporal fossa was a mere fissure which could scarcely have been produced by direct violence, and there had been bleeding from the ear. The brain, however, was uninjured at the time of the fall, though it was severely compressed by the blood-clot which subsequently formed. Such a case as this was altogether favourable for operative treatment provided that strict asepsis was maintained; and no case could more fully illustrate the supremacy with which the interests of the cranium may be treated when the brain has escaped material injury. Case 2 belonged to a different class. The original accident had produced injuries to the

brain which necessarily proved fatal That such injuries had occurred was considered very probable before the operation was performed. It was thought right to undertake it, however, because it was impossible to be sure what amount of damage the brain had in reality sustained In both cases the middle meningeal artery was at once seen on the surface of the dura mater In Case 2 after the vessel had given way and the end had been lost sight of bleeding was arrested by the strips of gauze which were introduced In any case in which the orifice of the vessel could not be reached bleeding no doubt could be stopped by this method It is obviously fortunate that, as a rule, as these and other recorded cases show, the artery leaves its groove in the bone and is to be found on the dura mater where it can be secured without much difficulty

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY

The Marshall Hall Lecture

A MEETING of this society was held on May 23rd, the President, Mr BRYANT, being in the chair

Professor SHERRINGTON delivered the Marshall Hall Lecture, taking for his subject "The Spinal Animal." After some introductory remarks he said that the total function of the nervous system was by physiological analysis resolved into reflex actions. If the segmental theory of the spinal cord, therefore, meant anything it meant that the reflex spinal arcs were gathered together into groups, one for each metamere, the arcs composing each single group being functionally more closely connected one with another than the arcs of one group with those of another This was the view which Mayo and Legallois introduced and it was insisted on by Marshall Hall. It drew some of its most trenchant support from invertebrate physiology Thus, when a scorpion was bisected the individual segments showed automatic movements, the hind part often running over the head. In the limulus if the brain were removed the respiratory movements continued and if the ganglia associated with individual segments were disconnected respiratory movements continued in each segment, though not synchronously If all the central nervous system of a frog except the brachial enlargement were destroyed the sexual clasp continued and in monkeys if only the tip of the spinal cord were left in relation with the sacral nerves wagging movements of the tail could be elicited. In human physiology the segmental theory had hardly been more than a figure of speech owing probably to the increased attention bestowed on localisation of functions or the brain The basis of each spinal segment was two groups of cells, afferent and efferent The "afferent" cells lay in the posterior root ganglion while the "efferent were in the cord The afferent cells were of three classes—cutaneous, visceral, and muscular The cutaneous distribution was of zonal type, lapping round one lateral half of the body in its own metamere The distribution of skin fields connected with adjacent segments, however, overlapped greatly, as was shown by Professor Sherrington's observations on the monkey In the limbs the sensory skin fields radiated from axial lines along the limb which corresponded with lines seen in certain animals with skin marking such as tigers and zebras, and they were probably not any more hypothetical than the dorsal and ventral mid lines of the body itself The distribution of the visceral fibres was a very difficult question The ramus communicans was probably the visceral and vascular spinal nerve Head, studying the localisation of pain and of patches of cutaneous tenderness associated with visceral affections had shown that they had a surface distribution not agreeing with the distribution of sensory nerves but segmental and showing a scheme harmonious with that which Professor Sherrington showed to hold good in connexion with the cutaneous distribution of the root ganglia The experimental investigation of the viscera for signs of afferent nerves had yielded curiously few data. The surgeon knew the insentiency of the viscera The gall bladder could be incised without the patient feeling it, but everyone knew the intensity of the pain of biliary colic The faradaic current could be applied to the collapsed intestine without causing any evidence of sensation or reflex action, but Professor Sherrington had found that if the intestine, ureter, or gall bladder were distended with fluid reflexes were produced, the reflexes not being affected by section of the vagus Each organ was supplied from many roots The existence of afferent muscular cells had been proved, the fibres coming from the muscle spindles which had been recently investigated by Dr F E Batten. Speaking of the distribution of the motor cells of the muscles, Professor Sherrington said that in the trunk region this was semi zonal, as seen in the intercostal muscles; in the limbs it was ray-like, the ray extending from the mid line of the body out into the limb, the front rays being shorter than the posterior rays Each root supplied many muscles and a single muscle in most cases received a multiple nerve supply Professor Sherrington had found that the afferent fibres of the muscle always entered the ganglia of those posterior roots whose motor roots supplied the muscle. This had been worked out especially in connexion with the knee-jerk. The motor root cells of each segment although not grouped as definitely as the ganglionic mass of afferent cells on the posterior root were shown to be of accurate and similar local distribution A local inflammation of the ventral horn might as accurately constitute a segmental affection as did inflammation of a spinal ganglion. Overlapping, however, which had been shown to complicate the investigation of sensory nerves also complicated that of motor supply So also in the visceral efferent roots, the little iris muscle, for example, having an overlapping distribution involving the first, second, and third thoracic roots So also there was much fusion between the segments of the cord themselves which had become so welded as to form a physiological integer in some respects This functional fusion was greatest in a longitudinal direction, there being some barrier preventing slight impulses from passing across the middle line Regarding the skin organs, in the spinal animal, as judged objectively by its movements, the field of the skin possessed certain foci of pre-eminent delicacy comparable in a way to the yellow spot region of the field of vision. These were the palm, the sole, the tip of the ear, the perineum, and the tip of the tail The interpretation of the reflexes usually given was that the movement was a protective one—the drawing up of the foot out of harm's way—but Professor Sherrington thought that the movement was more likely a piece of a great reflex of progression which the bulbo-spinal animal possessed. In Professor Sherrington's opinion one of the most instructive aspects of the spinal animal was in regard to muscular sense This was a sense which did not lie open to introspection. For example, flexion of the fingers was perceived but an individual had no consciousness that the muscles of the ventral side of the forearm were contracting There was evidence that the muscular sense-organs played a most important part in spinal sub-conscious reflex actions Thus, if an amphioxus were divided into three segments each of the segments would swim and right itself if inverted. The cricket stands after removal of its head, and a severed ray of a starfish will correct its position. The reflex movements associated with a segment usually concerned only that particular part of the body Many of them had to do with keeping the part clean as seen in the movements of the palps of crayfish and the elevation of the tail during defæcation in higher animals An exception in which reflex action was for the benefit of the whole individual was seen in the crab, in which if the leg were suddenly stretched by a weight the limb was detached, the detachment being due to the sudden contraction of a muscle which ruptured one of the basal joints. Lastly, Professor Sherrington referred very briefly to spinal shock. If the cord were cut across in a monkey there was profound paralysis of the skeletal muscles, greater even than that resulting from deep anæsthesia with chloroform This did not occur in the simpler forms of animal life The visceral muscles, however (bladder, rectum, &c), were not more affected in the monkey than in the frog Possibly this was due to the fact that in the higher animals the projection sense-organs (the eye, the ear, &c) were acquiring greater and greater dominance over the skeletal musculature although not over the visceral musculature, and that the shock and the profound paralysis were due to the sudden cutting off of connexions with these higher sense-organs.

EPIDEMIOLOGICAL SOCIETY

Enteric Fever in the Netherlands

A MEETING of this society was held on May 19th, Dr FRANKLIN PARSONS, the President, being in the chair

Dr R H SALTET, Professor of Hygiene in the University of Amsterdam, read a paper on Enteric Fever in the Netherlands, freely illustrated by maps and statistical tables, graphic and numerical Before entering on the subject, which he thought might throw some light on the causes and spread of this disease, he wished to describe the sanitary organisation of his country The kingdom was divided into seven provinces and subordinated to the provincial councils were those of the 1123 municipalities which with populations ranging from 200 to 500,000 were alike constituted of elected members presided over by a burgomaster nominated by the Crown These were the sanitary authorities, but the only official medical advisers were seven appointed by the Government and one by the municipality of Amsterdam, on whom devolved not only the supervision of the public health but the work of registration of births and deaths, the inspection of asylums, and the control of the medical profession. The census was decennial, but since besides the prompt registration of births and deaths every change of domicile was notified to the local authorities the population of every district was always known with a considerable degree of accuracy The causes of deaths, classified under 34 headings which had been unchanged since 1875, were certified by the medical man in attendance or, in the absence of such, by one appointed by the local authority to hold an inquiry, and in cases of a suspicious character after a judicial investigation Notification of infectious diseases had been obligatory since 1872 but was not complete, for many practitioners did not believe in the communicability of typhoid fever and some connived at the concealment of cases occurring in houses of business on account of the injury consequent on the regulation requiring a notice of the fact to be affixed to the premises Typhus fever, typhoid fever, and so-called continued fever were not strictly distinguished, some old school practitioners applying these names to severe, mild, and doubtful cases respectively In his opinion cases of such infectiveness as to attack the medical attendant or nurses might be fairly assumed to be typhus fever, but these were few, so that allowing for those of typhoid fever which were not notified the total deaths returned under the three descriptions represented approximately the true mortality from enteric fever Dividing the period 1875–95 into four quinquennia and taking the death rate per 100,000 population in each, he proceeded to inquire in the first place whether the causes of the decline in the mortality from typhoid fever were no other than the better social and sanitary conditions which had tended to lower the general death rate of the country This did not appear to be a sufficient explanation, for while the general death rate had declined by 14 per cent and that from tuberculous diseases by 16 per cent the reduction in the typhoid fever death rate had been no less than 63 per cent Next, as to the aggregation of population in town, while the urban death rate was always somewhat higher than that of the rural districts it had fallen by 20 per cent, as against 12 in the country, and as regards typhoid fever by 72 and 60 per cent respectively It was worth consideration that though crowding favoured the spread of infection the residents in towns enjoyed many material advantages and better medical attendance Thirdly, could any relation be traced between the water supplies and the prevalence of fever? The water question in Holland was beset with difficulties The most flourishing part of the kingdom lying below the sea level, with the subsoil permeated by salt water, the population had recourse to rain water stored in tanks, but in dry seasons they fell back on the polluted water of the canals and dykes, while elsewhere the towns found an unlimited but questionable supply in the rivers, and only on the higher lands could good drinking water be had from wells Gradually, however, towns and rural communes with an aggregate population equal to 28 5 per cent of the whole had been furnished with good public supplies drawn from wells, and Rotterdam and other towns comprising 12 5 per cent of the population were supplied with filtered river water Amsterdam, Haarlem, and The Hague obtained their supplies from wells in the range of sand dunes skirting the sea coast But no appreciable difference was noticed between the two classes, for the general death rate had fallen 19 per cent in those supplied with ground water and 23 per cent in those supplied with filtered river water, the fall in the typhoid fever death rates having been 68 and 54 per cent respectively, but in the latter it had been considerably lower from the first. Since river water seemed more exposed to pollution than that from wells it was possible that the lower mortality among the population using it might be partly owing to the greater cleanliness attainable with the more abundant supply of water Fourthly, there was the influence of the soil to which attention was first drawn by Pettenkofer, though its nature was still obscure. In the Netherlands the higher and drier provinces were, with the exception of Groningen poor and thinly peopled, the rich pasture land and flourishing centres of trade being for the most part below or little above the level of the sea While however, enjoying many favourable social conditions these districts suffered from the disadvantages of an absence of running streams, the rivers so called being shut up within locks and of the instability of the peaty soil which precluded the erection of substantial buildings even with the aid of piles driven into the clay beneath, while the disposal of sewage and factory waste was beset with difficulties The general death rate in the low lying rural communes, which was formerly higher than in the more elevated, had shown a greater improvement, but that from typhoid fever had declined almost equally in both On the whole a fall of 72 per cent in the typhoid fever mortality among the urban population and of 60 per cent among the rural population seemed to suggest that while sanitary improvements had operated equally throughout, the progress of medical science, the benefits of which were enjoyed to a greater extent by the inhabitants of the towns, was a factor the influence of which was far more powerful than was commonly supposed

Mr SHIRLEY MURPHY said that the great reduction in the mortality from typhoid fever of late years had in England and Germany been naturally ascribed to the introduction of better water supplies and sewage disposal, but after listening to Dr Saltet's able examination of the possible factors he could not but think that a partial explanation might be found in a diminished infectivity in accordance with Dr Whitelegge's doctrine of cyclical variations in virulence

Professor NOTTER remarked that the stationary character of the population of the Netherlands would favour their acquisition of a degree of immunity, in India the extreme susceptibility of Europeans recently arrived was notorious, as was the rapid increase of resistance with each year of service or residence

Dr THEODORE THOMSON, Dr CHRISTOPHER CHILDS, Dr WASHBOURN, the PRESIDENT, and Dr WILLOUGHBY also took part in the discussion

Dr SALTET, replying, explained that the wells were mostly from 100 to 120 feet deep in the superficial sand only, though as remote from habitations as possible while the river waters were subjected to sand filtration under regulated pressure and velocity Typhoid fever in the Netherlands was mostly sporadic, epidemics being rare

EDINBURGH MEDICO-CHIRURGICAL SOCIETY

Exhibition of Patients and Specimens

THE eighth ordinary meeting of this society was held on May 17th and was devoted to the exhibition of patients and specimens, Sir JOHN BATTY TUKE, President, being in the chair Before entering on the work of the meeting the PRESIDENT made reference to the death of one of their oldest members, Dr John Moir, and it was resolved to send an expression of the sympathy of the society to the relatives

Dr SHAW M'LAREN showed 1 A boy after operation for Congenital Torticollis Instead of performing subcutaneous tenotomy the muscle was cut through by an open incision No apparatus was applied and now the boy could turn his head well round towards the right The right side of the face was noticeably larger than the left—a condition often noted in such cases 2 A lad after operation for Ruptured Bladder He was first seen 24 hours subsequently to his accident, having been run over by a cart He was passing frequently small quantities of urine and a catheter passed easily into the bladder The wound was found to be low down on the anterior wall at the junction of the bladder and urethra The wound was drained through the perineum and naturally became septic The patient was now almost well after having

been ill for some time. 3 A man, aged 70 years, after operation for Tumour of the Bladder The only symptom which showed itself in this case was a sudden and profuse hæmaturia which came on one day This passed off and the urine appeared to be normal. The cystoscope showed the presence of a villous tumour on the anterior wall. A vertical incision was made over the pubes and the bladder was opened, no transverse incisions being necessary The tumour was drawn up and clipped off with scissors It was found to be a simple papilloma. 4 A man with old standing Pott's Fracture or the Fibula with Backward Dislocation of the whole Foot Radiographs showed the condition well

Dr AFFLECK stated that at the present time he had five cases of diabetes in his wards, four being cases of diabetes mellitus and one insipidus 1 A case of Acute Diabetes Mellitus in a boy, aged 13 years The case was only of two months duration, the boy having been perfectly well previously Thirst and polyuria were the first symptoms noticed. The quantity of urine had been as high as 260 ounces per diem. It was now 110 ounces but contained 36 grains of sugar to the ounce The patient exhibited markedly the facies diabetica—the dryness of the skin, the thinness of the face, and the languid appearance. His weight was 4st 7½lb 2. A man, aged 40 years, suffering from the same disease The symptoms had been present for more than two years He had passed as much as 240 ounces of urine daily, though now this had fallen to 120 ounces. There were over 30 grains of sugar to the ounce He also showed evidences of peripheral toxic neuritis—e.g pains in the limbs, sensory disturbances, together with atrophy of the optic nerve (no cataract) 3. Diabetes Insipidus in a youth, aged 16 years He had been ill for 18 months No cause could be assigned for the onset. Thirst and polyuria were the only symptoms The urine passed had amounted to 600 ounces per diem, now, however, he passed about 480 ounces. The specific gravity was very low—1001 He was gaining weight.

Dr JAMES exhibited 1. A case of Cirrhosis of the Liver with Abdominal and Thoracic Effusions communicating When first seen the patient was dyspnœic from ascites and effusion in the right pleural sac He was repeatedly tapped both in the chest and abdomen, but on each occasion the amount of fluid drawn off from the chest increased—for example on April 3rd 382 ounces were withdrawn on April 18th 392 ounces and on May 15th 446 ounces The pleural sac could now only contain about 120 ounces and therefore in emptying it the abdomen was also emptied at each of these operations Dr James first thought that this must have been due to lymphatic absorption during the slow draining away of the fluid from the chest but he found by experiment that the pressure in either cavity as registered by a manometer was the same When an inspiration was taken the pressure in the thoracic fluid rose just as it did in the abdomen In this case there must, therefore, have been some communication between the thoracic and abdominal cavities, probably at the posterior origin of the diaphragm. 2. A case of Adult Rickets in a man aged 23 years The disease began when the patient was 17 years of age with the usual symptoms—pains in the legs the head enlarged in size, and the chest becoming deformed The radioscope showed that there was hardly any osseous matter in the terminal phalanges. The patient was distinctly shorter than he had been

Dr ALLAN JAMIESON showed a boy, aged eight years, in the early stage of Tropho-neurotic Leprosy The patient lived in British Guiana The father was a mulatto but the mother was fair There was no hereditary history of leprosy The disease was, however, endemic in Georgetown. The boy six years ago slept with a nurse who was found to be suffering from a sore on the leg which was pronounced to be due to leprosy in the ulcerating stage Two years ago the mother noticed the appearance of maculæ on the face and ears and was suspicious about them. She therefore sent the boy home for observation. On the face and chiefly on the skin these purplish maculæ were to be seen. On the radial aspect of the arms they were of a faint brownish purple colour as they were also on the legs On the back there were brownish stains with white centres On the nates there was a morphœa like spot At the centres of these stains there was a certain dulling of sensation, but it was not well marked. The hands were large and there was a degree of paralysis as the patient was not so active manually as he had been The ulnar nerve was unaffected. 2. Two women with almost identical Deformity of the Face In both the cartilages of the nose had been destroyed and the mouth was narrowed In one case this had been due to lupus vulgaris and in the other to undoubted specific disease The resemblance in the cases was very close.

Dr MACGILLIVRAY showed two cases of successful operation after Ruptured Gastric Ulcer 1 In the first case (a female aged 24 years) the leakage from the ulcer had been going on for about 36 hours before the patient became collapsed On opening the abdomen gas and large quantities of sero-purulent fluid escaped with flakes of lymph, a counter opening had to be made above the pubes and the cavity was washed out with normal saline solution 2. In the second case the stomach was found to be divided into two compartments by a constricting band This caused such a narrowing that only the forefinger could pass through The operation was performed so as to remove this constriction as well as to repair the rupture. On account of the sero-purulent fluid in the abdominal cavity saline fluid was used to wash it out

Dr WILLIAM RUSSELL exhibited 1 Two specimens illustrating one of the Unusual Positions of the Vermiform Appendix. In the case examined post mortem the appendix was one finger length in size and lay behind the cæcum with its long diameter along the line of the ascending colon. In the second case, examined during life, Dr Russell diagnosed a similar condition of affairs and at the operation the tip of the appendix was found to be gangrenous and lying behind the ascending colon 2. Specimens from two cases of Perityphlitis not originating in the appendix. One showed the presence of well marked shallow ulcers in the cæcum due to impacted fæces. The caput cæcum was thickened and perforated while the appendix was perfectly healthy In the second case which was operated upon the appendix was found to be normal while the caput cæcum was deeply inflamed and covered with lymph The appendix was removed, but the patient died and at the necropsy shallow ulcers were found in the caput cæcum the result of fæcal impaction

Dr ROBERT FLEMING showed numerous specimens illustrating Tuberculous Disease in various organs

Mr FRANCIS CAIRD showed 1 A patient after removal of a Carcinoma of the Pylorus The man was operated on three years ago for what was supposed to be cancer of the pylorus On opening the abdomen then a mass of the size of a fist was found and the surrounding glands were so enlarged and hard that it was deemed inadvisable to remove the tumour Gastro-enterostomy was, however, performed Two years later the patient returned evidently in good health but with a ventral hernia which he desired to be operated upon. This was done and at the operation it was found that the supposed cancerous mass had entirely disappeared, leaving no trace of disease 2. A man who three years ago was operated upon for localised typical Scirrhus of the Pylorus He was now in excellent health. 3. Specimens from a child who had exhibited symptoms of Tuberculous Peritonitis There was a peculiar thrill evident but no protrusion of the umbilicus. On opening the abdomen numerous mesenteric cysts containing either clear serum or a fluid like milk were found. The latter were evidently cysts into which the lacteals had burst. 4 Nodules of Recurrent Scirrhus removed from the Breast nine years after the first operation Since the first operation there had been a certain amount of recurrence and these nodules had been removed as they appeared, as they lay quite superficially to the pectoralis major 5 A Cystic Tumour of the Testicle 6 A Fibroid Tumour of the Uterus which had undergone Malignant Degeneration. Panhysterectomy was successfully performed

Mr OATHCART showed a specimen of Multiple Gastric Ulcer This was from a patient who was thought to be suffering from appendicitis The peritoneal cavity was found to be full of fœtid pus and fluid An ulcer in the stomach was found and sutured and the abdomen was washed out Hæmatemesis however recurred and the patient died The post-mortem examination showed that there were three ulcers present in the stomach, one of which had ruptured while another was only covered by a thin layer of peritoneum

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ROYAL ACADEMY OF MEDICINE IN IRELAND

SECTION OF STATE MEDICINE.

Formic Aldehyde—Cancer in Ireland

A MEETING of this section was held on April 28th, Dr. H. C TWEEDY, the President, being in the chair

Dr LITTLEDALE and Dr KIRKPATRICK made a communication on the subject of Room Disinfection, with Special Reference to the use of Formic Aldehyde.

Dr LITTLEDALE said that the experiments were carried out in a room having a capacity of 28 cubic metres (989 cubic feet), with no opening into it but the door, and 10 grains of formalin tabloids were vapourised in an "alformant" lamp. The yellow air coccus, bacterium coli commune, staphylococcus pyogenes albus, bacillus typhosus, pus, sputum, and putrid urine were the test objects exposed Threads were steeped in emulsions of these various objects, wrapped in filter paper and lint, or concealed in the pocket of a coat or between the leaves of a book, or exposed quite open to the vapour All the objects freely exposed were found to be quite incapable of growing on nutrient media after a nine hours' exposure to the formalin, but concealment in a coat-pocket or between the leaves of a book seemed quite sufficient to prevent their being acted upon to any degree, as all bacteria so exposed were not at all or only slightly hindered in their growth The sputum was openly exposed on cover glasses, on which it had been allowed to dry in the oven at 37° C, and after exposure for nine hours no growth took place in broth for two days—that is, until the surface layer digested off and the deep surface was exposed, as could be seen by the shaggy appearance of the layer on the cover glass Everything in the dried pus which was openly exposed on gauze was killed except a leptothrix. Agar tubes of definite dimensions were inoculated over a sloped surface for a known distance and exposed just immediately after inoculation, and after the experiment were kept at 37° C Growths appeared in these tubes but not over the whole length of the smear No inoculation experiments were undertaken on animals —Dr KIRKPATRICK said that an efficient yet easily applicable mode of room disinfection was greatly needed for such chronic infectious diseases as tuberculosis and could hardly be obtained except by means of gaseous disinfectants Professor Koch had shown that sulphurous acid gas was useless for practical purposes, while Dr Fischer and Dr Proskauer had proved that to apply chlorine and bromine efficiently was quite as difficult as to disinfect with germicidal solutions The disinfection of rooms by means of formic aldehyde generated by Messrs Zimmermann's "alformant" was very much simpler than any other of the modes of gaseous disinfection considered, while it was superior to any of them in point of efficiency —Dr NINIAN FALKINER, Dr KNOTT, and Dr TWEEDY having discussed the subject, Dr KIRKPATRICK, in his reply, stated that six or seven hours would be sufficient to thoroughly disinfect with formalin vapour, and on opening the doors and windows after this the smell at once disappeared, which was not the case with sulphurous acid or other gaseous disinfectants

Dr MARTLEY read a paper on Cancer in Ireland After contrasting the deaths from cancer in Ireland and England—the former rate being roughly only 70 per cent of the latter—he illustrated by maps its very unequal incidence in different localities, the parts most affected being the east of Ulster, Dublin, and Carlow —Dr T W GRIMSHAW, C B, Registrar General, remarked that maps showed that cancer was prevalent in most Anglicised parts of the country, for example, they might look at Carlow, which they knew to be an old English colony, and Dublin, containing a large proportion of the population of English descent —Dr JOHN W MOORE explained the preponderance of cases in Dublin and Belfast by the fact that in country districts the medical men were often reluctant to give cancer as a cause of death owing to the existing dread of the disease on account of its hereditary nature, also the diagnosis of cancer was usually verified in the city hospitals by a necropsy, which was not the case in the country, in addition, Dublin and Belfast received cancer patients from all parts of the country

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ÆSCULAPIAN SOCIETY OF LONDON —A meeting of this society was held on May 19th, the President, Mr D H Goodsall, being in the chair —Mr W Campbell M'Donnell showed a man, aged 64 years, with some Atrophy of all the Muscles of the Left Thigh resulting from Sciatica of five years standing This wasting was held to be a reflex result of the peripheral ir[illegible] —Mr Reginald Brown read notes of the ollowir[illegible] primipara, aged 22 years, wit[illegible] el[illegible] conjugate of 8 3 centimetr[illegible] igorously used did not advance the head Perforation was accordingly resorted to and delivery effected easily 2 A multipara, aged 34 years, with a Flat Pelvis having a true conjugate of nine centimetres, whose child was delivered by version —Dr Durno read notes of a case of Excision of the Breast of a Woman, aged 45 years, for Scirrhus There was profuse recurrent hæmorrhage which was stopped by the local application of turpentine and re dressing to be soon followed by a fresh outburst in alarming quantity for which the local application of tincture of perchloride of iron and a saline enema sufficed with the wound left open Epistaxis occurred next day, so the nares were plugged and a saline enema was again used Uterine hæmorrhage varied the site next day and was controlled by a crystal of iron alum The patient ultimately recovered —Dr J R Conner read notes of a case of Post-Influenzal Phlebitis in a man, aged 31 years, whose left calf swelled on the twenty second day after influenza A few days later the thigh swelled and the superficial femoral vein could be felt to be hard Pressure made on this thrombosed vein produced swelling of the leg, superficial veins suggesting canalisation of the clot In 17 days from the onset of the phlebitis the swelling of the leg had almost disappeared —Mr E C Hearne showed a boy, aged 16 years, with the right leg reaching just below the left knee and having a ball and socket hip-joint, a normal ankle, two bones running throughout, but no knee-joint. The right hand had a thumb and three fingers, of these the third and fourth were webbed. The left hand had no thumb, no carpus, and three fingers, two of which were webbed The left ulna and radius were much dwarfed and curved.

BRISTOL MEDICO-CHIRURGICAL SOCIETY —The eighth meeting of the session was held in the medical library of University College, Bristol, on May 10th, Dr A. J Harrison being in the chair —Mr J L Firth showed a patient with Cervical Ribs —Mr Paul Bush showed a patient with Displaced Scapula —Dr W H Newnham showed a specimen of Intra peritoneal Hysterectomy —Dr T Fisher showed the following specimens (1) Pancreas containing Calculi, (2) Malignant Growth of the Cæcum, (3) Sarcoma of the Ileum, (4) Fibrous Myocarditis, and (5) Lungs with Broncho-pneumonia breaking down into Cavities —Dr B Rogers showed some microscopic slides with Liver Disease —Dr E Stack showed a most interesting series of Kidney Specimens —Dr W H Newnham communicated a paper on Removal of One Ovary, with an account of cases

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Reviews and Notices of Books.

A Text-book of Organic Chemistry By Professor VICTOR VON RICHTER Edited by Professor R ANSCHÜTZ of the University of Bonn Translated by EDGAR F SMITH, Professor of Chemistry in the University of Pennsylvania Third American (from the Eighth German) Edition. Vol I Chemistry of the Aliphatic Series London Kegan Paul, Trench, Trübner, and Co, Ltd 1899 Pp 625 Price 15s

WE doubt whether there is a chemist living whose opinions on organic chemistry are more respected than those of Professor von Richter That being so, it is not surprising that his well known text-book on the chemistry of the carbon compounds has reached in the language in which it was originally written eight editions and still less surprising is it that this work should have been translated into English The volume before us is the third American edition and its title-page bears the names of three well known chemical authorities, Professor von Richter himself, Professor R Anschütz the editor, and Professor Smith the translator The volume deals with the chemistry of the aliphatic series, the fatty substances, or what may be called the acyclic carbon derivatives which contain open carbon chains, as distinguished from the aromatic or benzine compounds, the cyclic compounds of carbon, which contain closed carbon chains, Volume II of the work which is in course of preparation will be devoted to the aromatic series and it is hoped that the work will be published during the

present year The classification adopted is on the whole the most convenient After devoting several chapters to the broad question of the structure of carbon compounds, their physical characters; composition, and analysis, the hydrocarbons and their halogen derivatives are discussed In proper sequence the oxygen derivatives of the methane hydrocarbons follow This section includes the monohydric alcohols of which methyl alcohol is the starting point and their oxidation products Then come the dihydric alcohols or glycols, next the trihydric alcohols of which glycerine is the type, the tetrahydric alcohols, the penta hydric alcohols, and lastly the hexahydric alcohols, which include, of course, that important group of bodies the sugars and other carbohydrates The last section is devoted to animal substances of unknown constitution, the albumins, &c We find here no reference to the alleged synthesis of albumin which was announced last year by Dr Lilenfeld at the International Congress of Applied Chemistry at Vienna. On p 234 we note that it is stated that to get rid of the phosgene in chloroform about 1 per cent. of alcohol should be added This is not correct, the addition of alcohol helps to prevent the formation of phosgene but does not destroy it Baryta and lime will, however, effectually remove this impurity so that pure chloroform may be obtained by distilling it in contact with these substances The outline given of the Kjeldahl method of determining nitrogen is very meagre and not sufficient to afford any practical guide Indeed, the addition of potassium permanganate is enjoined, but this is now known to lead to error by reason of the loss of nitrogen through the energetic action of the oxidant

The fact that Professor von Richter is one of the first exponents of organic chemistry stamps the book with authority, and it is certain therefore to be a favourite manual which will be resorted to as a reliable source of reference and for study It teems with facts and contains an explicit account of the theory of the science and the architecture of the complex organic molecules

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Modern Drainage Inspection and Sanitary Surveys By GERARD J G JENSEN, C E London The Sanitary Publishing Company, Limited 1899 Price 2s 6d net

THIS book is thoroughly in accord with its title, being a most useful guide for those upon whom devolves the responsibility of planning or inspecting systems of drainage Though terse very little that is necessary for guidance is omitted, the work being evidently the outcome of much practical experience of the subject treated Mr Jensen first draws an ideal picture of what a sanitary inspector should be, but it is to be feared that few will fully attain to it

The book, which is very systematic in arrangement, first reviews some of the various appliances used in drain testing, &c The course to be adopted by the inspector in conducting a survey is next pointed out and the various defects to be expected are described, while suggestions are made for their removal or remedy Several illustrations both of defective and approved appliances are given, together with sundry block plans showing the most desirable arrangements for house drains under varying conditions A chapter is devoted to describing the use of some of the testing appliances already spoken of There is a point where the distinction drawn by Mr Jensen is not quite apparent—viz, why on page 42 he so strongly and properly objects to the slop sink delivering over a gully while on page 48 he advocates that urinals should always do so

A capital chapter furnishing hints upon taking notes and preparing reports is illustrated by examples which many engaged in such work might study both to their own and to their readers' advantage The book is convenient in size for the pocket and we can strongly recommend it.

LIBRARY TABLE

Skiagraphic Atlas showing the Development of the Bones of the Wrist and Hand, for the Use of Students and Others By JOHN POLAND, F R C S Eng London Smith, Elder, and Co 1898 Royal 8vo Pp 41 Price 5s —This is in part a reprint of a portion of the author's treatise on the Traumatic Separation of the Epiphyses It deserves, however, to be presented in this separate form, for it should prove of value to lecturers on anatomy, as the plates show very clearly the process of ossification of the bones of the hand, the wrist, and the distal ends of the radius and ulna A description is given in the text of the development of each bone and the plates, which are reproductions of skiagrams, illustrate the appearance of centres of ossification and the times when they join There are in all 19 skiagrams of the hand and wrist at various ages

Animal Simples Approved for Modern Uses of Cure By W T FERNIE, M.D Durh Bristol J Wright and Co Pp. 566 1899 Price 6s —Although we cannot, like Dr Fernie, approve of animal simples for modern uses of cure at least in every case, yet we must thank him for having collected for the general reader a vast amount of entertaining lore There are but few of us who have the opportunity or the leisure to read through the pages of that immortal work "The History of Four footed Beasts" by Topsell or the many sixteenth and seventeenth century popular works on Physick. Dr Fernie, however, has extracted the salient parts of such works and arranged them in a handy form for reference

The Chemical and Biological Analysis of Water By T H PEARMAIN and C G MOOR, M A London Baillière, Tindall, and Cox 1899 Pp 172. Price 5s —This is Part II of a work undertaken by these authors on the analysis of foods and drugs Part I was devoted to milk and milk products which has already been critically noticed in our columns Part III dealing with foods and Part IV dealing with drugs are in preparation The volume before us will be found a useful guide to those undertaking the chemical and biological analysis of water The material is chiefly collated but the authors interpose with generally sensible remarks on the value of bacteriological and chemical examination respectively Their remarks on the construction to be put upon the results obtained from an examination are fully in accordance with recent knowledge

Chemistry for Photographers By CHARLES F TOWNSEND, F C S, F R.P S Second edition, revised London Dawbarn and Ward, Ltd. 1899 Pp. 158 Price 1s —This little work adequately fulfils the purpose for which it has been written Photographers, amateur or professional, should know something of the chemistry of the processes concerned in the production of a photograph and such information should be easily derived from a perusal of the pages of Mr Townsend's book It is written to meet the requirements of the average amateur and technicality is as far as possible avoided The book is well adapted for those who prefer, figuratively speaking, not to work in the dark The fact of a second edition being issued tends to show that this contribution to the chemical side of the subject is appreciated

The Essentials of Chemical Physiology By W D HALLIBURTON, M D Lond, F R S Third edition London Longmans, Green, and Co 1899 Pp 199 Price 5s —This is the third edition of an eminently practical and well-known manual Recent advances in chemical physiology have necessitated some revision in order to bring the work quite up to date Dr Halliburton as the result of considerable teaching experience knows exactly how to bring the subject in its practical relations before the student The book deals with facts rather than theory and in a way which a student familiar with bench work cannot

fail to grasp Dr Halliburton divides his volume into two parts, the first comprehending an elementary course and the second an advanced course In the appendix a description of the instruments and methods employed in physiological analysis are described The book may be confidently recommended to the student who is anxious to commence a thorough and practical acquaintance with the essentials of chemical physiology

Manual of Clinical Chemistry By ELIAS H BARTLEY, B S, M D, Ph D Philadelphia P Blakiston's Son and Co 1899 Pp 150 Price $1 —In a review of Dr Bartley's text-book of medical and pharmaceutical chemistry which appeared in THE LANCET of March 18th, 1899, we suggested that the section in that work which dealt with physiological and clinical chemistry might form a separate handbook since the subject was so serviceably and suitably treated The receipt from the publishers of the above manual shows that our suggestion has been adopted We have nothing to add to our former remarks except that the book deals with a subject of first importance to the student of medicine and that in this manual he will find all the requisite facts and practical directions neatly and clearly placed before him

Sewage Analysis By J ALFRED WANKLYN and WILLIAM JOHN COOPER London Kegan Paul, Trench, Trübner, and Co 1899 Pp 215 Price 7s 6d —We anticipated that we might have been able to congratulate Messrs Wanklyn and Cooper on adding something fresh to this important subject, but frankly we cannot Indeed, it is quite an elementary book on the subject, in which one of the authors—Mr Wanklyn—takes the opportunity of making personal references and of emphasising his own contentions on his own pet subjects He grumbles all through at the attitude of certain English chemists whose views differ from his own He objects, for example, to the failure, as he calls it, of certain English chemists to express the results of the ammonia process on the only scale ever sanctioned by himself He regards this "tampering with analytical results" as rapidly assuming the dimensions of a public scandal "and the originator of albuminoid ammonia warns those persons that the expression of the results in parts per 100,000 lays the analyst under the suspicion of representing the liquids as being ten times too pure" Again, he declares that the circumstances under which his work has been carried on—for example, the severance of all relations with the London Chemical Society—have operated advantageously to him "The wave of fad and fallacy at present passing through the Chemical Society has not disturbed us in our laboratory" Then he tilts at the experiments of the late chemist to the London County Council in which purification of sewage by bacterial agencies was attempted and with some success Mr Wanklyn scouts the idea of bacterial agencies affording a satisfactory solution of the sewage problem In this we fancy he is quite alone There are two points in the book which are worthy of note and which somewhat redeem it from the impression that there is nothing new in it These are the significance of carbonic acid in sewage and the process elaborated by the authors for the estimation of organic matters by the moist combustion process Mr Wanklyn has done excellent service in bringing forward methods for the detection of impurity in water and in sewage effluents, but he rather tends to belittle what he has done by taking up the futile and contentious attitude which marks his latest literary contribution

Outlines of Physical Chemistry By A REYCHLER Translated from the French by JOHN MCCRAE, Ph D London Whittaker and Co 1899 Pp 268 Price 4s 6d —Physical chemistry is a branch of general science which has developed so much in recent years as to call for separate works on the subject The little work before us is a translation from the French which had been commenced by the late Dr Hurter whose untimely death, however, occurred soon after he had commenced this task The work of translation was then taken up by Dr John McCrae who is the demonstrator of chemistry in the Yorkshire College, Leeds We congratulate him upon the result Though a small work it is divided into four parts, the first dealing with the elementary laws of chemical combination, the atomic hypothesis (surely this should be theory), the gaseous state, the specific heat of elements, and the constitution of the molecule, the second part with the gaseous liquid and solid states, the third with thermo chemistry, electro chemistry, and the nature of salt solutions, and the fourth with chemical equilibrium, chemical dynamics, and hydrolytic dissociation The appendix contains amongst other things a table of atomic weights and a table of the heat of formation of salts As we have said, the subject dealt with is of increasing importance and it is satisfactory to find that facilities for obtaining a sound and intimate acquaintance with the principles concerned are by means of this text-book afforded to the student

Milk, its Nature and Composition By C M AIKMAN, M A, D Sc Second edition London Adam and Charles Black 1899 Pp 176 Price 3s 6d —Dr Aikman is a prolific writer on agricultural questions and the little volume before us is not the least important and interesting of his contributions He writes scientifically, authoritatively, and clearly The fact of a second edition of this little book being published speaks favourably of its reception We thoroughly endorse the views expressed by the author in regard to the standard composition of milk The following sentence, it seems to us, indicates a plain way out of the difficulties of establishing a definite standard "Milk should be defined under the Sale of Food and Drugs Act as the normal secretion of the mammary glands of the cow" And he asks, Ought it to make much difference where the quality of the milk is so poor whether the sample has been adulterated in the technical sense—that is, been submitted to a watering process subsequently to its being obtained from the cow's udder or not? We would reply no, and we agree with Dr Aikman that it is obviously unfair that a person who expects to obtain ordinary milk should be provided with abnormal milk This little work must be reckoned as one of importance to agriculture as the author writes in no uncertain terms on the subject both on the technical and scientific sides

A Short Practice of Midwifery, embodying the Treatment Adopted in the Rotunda Hospital, Dublin By H JELLETT, B A, M D, Dub, F R C P Irel With a Preface by W J SMYLY, M D Dub, F R C P Irel Second edition Illustrated 1899 Pp 380 Price 6s —We are not surprised that this book should so soon have reached a second edition It gives a clear and concise account of the teaching of the Dublin School of Midwifery and is an admirable manual for its size In this second edition some alterations have been made in the arrangement of the chapters and some 60 pages of fresh matter have been added The main features of the book, however, remain the same A very interesting table is appended showing the nature of the cases, 11,958 in number, treated in the Rotunda Hospital during the 10 years 1889 to 1898 From this we find that the average morbidity—under this heading is included every case in which the temperature rose even once above 100 8° F —for the 10 years is one in 13 8 The average maternal mortality during the same time is one in 159, or a percentage mortality of 0 62 A second table is given showing the cause of death in each of the 75 cases which ended fatally during this period These two tables add greatly to the value of the book they furnish us with a number of important obstetrical data and enable us to form a clear idea of the value of the treatment advocated

THE LANCET.

LONDON SATURDAY, MAY 27, 1899.

THE session of the General Medical Council will begin on Tuesday next at 2 P M The *personnel* of the Council is unchanged save by the lamented death of Sir WILLIAM ROBERTS who never spoke much but whose quiet influence was always felt His successor in the representation of the University of London is Dr PYE SMITH The meeting promises to be a very busy and interesting one It would not be difficult to name 16 or 18 subjects of great importance which will call for discussion apart from the penal cases and applications for restoration to the Register which generally take up two or three days of the Council's time The subjects of spurious diplomas, of unqualified dispensers, of instruction in vaccination under the new conditions of the Act of 1898, of the inspection of the documents of the Council, of procedure in penal cases, of the examinations of the Apothecaries' Hall of Ireland, of the amendment of the Medical Acts, of increasing the stringency of the preliminary examinations, of medical aid associations, of the HUNTER case, and of an increase in the penal and disciplinary power of the qualifying bodies and of the General Medical Council, are all likely to occupy more or less of the Council's time, to say nothing of others which have been adjourned from past meetings It would be well if the General Medical Council would take a lesson from the failures of another public body which is constantly overwhelmed with the variety of subjects which it undertakes to deal with and which by undertaking too much often does badly what it might do well On the other hand, the critics of the Council will do well to recognise that in the very nature of things it cannot act with that precision and despatch which a body less complicated in composition and less vague in function and power might display It has even more excuse for slowness in reform than Parliament has It cannot make its own laws, it is, after all, an administrative and not a legislative body and must be taken and judged as such It must be admitted that this is the view which is generally taken by the profession as regards the Council and its work and that with all the defects of its action and in spite of occasional errors of judgment it reflects pretty truly the general opinion of the profession The action of the General Medical Council in the matter of unqualified assistants is a good illustration of this statement The Council was slow to recognise its own powers in regard to an admitted evil For many years it used its powers very sparingly if at all At length it came to see that its powers were much greater than it had thought them to be and with two or three resolutions it abolished practically at a stroke the whole race of unqualified assistants

It is probably owing to the representative constitution of the Council and to the slow and cautious use of its powers that the Government so frequently applies to the Council for its opinion on questions affecting the medical profession The proceedings of the coming meeting will supply several illustrations The Government of Italy, through the Italian Ambassador here, has applied to our Government for information in reference to the professional status of Italian graduates in this country and has sounded the Government to ascertain its views in reference to a system of reciprocity between the countries, in virtue of which those entitled to practise in Italy might be free to practise here and *vice versâ* The Government has applied to the General Medical Council for its views and the answer of the Council will be watched with interest by the profession Apart from the pleasure and duty of international amenity in such matters it is obvious that we have more to gain than to lose by entertaining proposals of the sort from most foreign countries The Government has acted similarly in respect of a Bill to amend the Medical Acts transmitted to it by the Incorporated Practitioners' Society The recent action of the Lord President in regard to the Midwives Bill is fresh in the memory of the profession It is probably in this way that the General Medical Council will be able to do most good in influencing legislation affecting the health of the people and the rights of medical practitioners

We do not intend to speculate as to the subjects to which the Council will devote most of its attention But there can be no doubt as to two or three great questions into which it should put all its power and judgment One of these—perhaps the greatest of them—is the elevation of the standard of preliminary education The action of the Council and of its Education Committee has already stirred the educational bodies affected and called forth some complaints of partiality and unfairness These complaints must be investigated by competent and unprejudiced persons But the Council cannot escape from its responsibilities in this matter The raising of the standard of the education of medical students can only be secured by a thoroughly sound general education, and this must be carried out by the action of the General Medical Council It is not called on to make any unreasonable demands, but it is required to fix a much higher standard than the present for entrance into the profession Another very urgent matter calling for attention is the amendment of the Medical Acts It is obvious to all that the penal clauses of the present Acts are most uncertain in their operation The Council will shortly be called upon to sanction the outlay of £142 for a perfectly ineffective prosecution under the Medical Acts in Scotland where the matter to most people was as clear as daylight Other cases point in the same direction It is in the interest neither of the public nor of the profession that such a state of the law should exist and the General Medical Council itself is the body which should move for the amendment and that without delay We have noticed only two subjects, either of which might occupy with advantage two days of the Council's time But there remain the questions of medical aid associations, of the action of the Council in the HUNTER case, penal cases of some novelty and much interest, and the very pressing question of increased disciplinary powers for the degree- and diploma granting bodies as well as for the General Medical Council—from all of which we shall not be far wrong in prognosticating a week of arduous

work. The reports, also, of various committees will demand the attention of the Council One of especial importance emanates from the Education Committee and deals with the use of the first of the five years of the medical curriculum and the recognition of schools as teaching institutions where chemistry, physics, and biology are taught. Upon these points a lively controversy is likely to arise

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IF we remember aright M TAINE, with the terse and graphic exaggeration which so often characterises the expressions of French writers, declared that a degree of heat more or less, an inclination of the soil, and racial descent, were the primary causes of our faculties and passions Be this as it may, no one denies that the sum of all the meteorological and physical conditions which make up what we understand as the climate of any given place has a considerable influence on animal and vegetable life. Notwithstanding the remarkable power of adaptability to climate which man possesses it does not belong to every man And it must be borne in mind that the constitutions of all of us have to accommodate themselves to the environing conditions and not *vice versâ*, for it is certain that no change will occur in these conditions in order to harmonise them with the requirements or needs of living beings From the slight and relatively insignificant changes which ensue on the first arrival of an immigrant into a new locality and climate it is conceivably easy to trace our way up to those greater, more appreciable, and more enduring modifications in a race embraced in the term "acclimatisation" Whether a traveller freshly arrived in a new locality appreciates or not the effects of a change of climate his organism does not fail to do so, it has to accommodate itself to its new surroundings and may be said to be in a state of unstable equilibrium whilst doing so This does not, however, imply that a hot climate must necessarily be injurious to the European and can only be overcome by some powers of resistance acquired by residence During this physiological process of adaptation, or "seasoning" as it is often called, his system manifests an increased vulnerability or susceptibility to the diseases incidental to the conditions of a new environment the bodily functions become exaggerated or perverted, overstepping their limits the physiological may easily become pathological, in short, the newly arrived unacclimatised resident has to submit to nature's test of the survival of the fittest. In connexion with this subject the article on The Influence of Warm Climates on the Constitution, by Dr EDWARD A BIRCH, in "Davidson's Hygiene and Diseases of Warm Climates," is worth reading, especially in reference to the effect of these climates on the physiological functions That residence in hot climates under the circumstances of ordinary life has an adverse effect upon Europeans cannot, we think, be doubted. Some constitutions seem to be altogether unfitted for these climates and such individuals lose their health and physical energy from the moment of their arrival A still larger number do so sooner or later under a more protracted residence, even if they escape being attacked by one or other of the endemic or epidemic diseases incidental to such climates. Residence in tropical and subtropical countries usually produces a very appreciable effect not only on the complexion but on the constitution and notably so during childhood and youth

Thus far, however, we have mainly spoken of the effects of climate in a restricted sense—namely, on the individual unit and not on the race, but it is only on the latter that acclimatisation, as understood by naturalists and climatologists, really comes in, for one must count by generations and not simply by years for the completion of that process, because by acclimatisation we understand the adaptation of animals and plants to a climate different from their own brought about by a slow and gradual series of changes the effects of which are of an enduring and more or less permanent character In studying the physiological and racial changes which have taken place in order to adapt and harmonise the inhabitants of the world with the different climates in which we find them we need to have recourse to time in a geological rather than an ordinary sense, and many authorities even go so far as to doubt whether true and perfect acclimatisation ever takes place They point to distant ages in the past in which we have evidence of the existence of the various types of the human family such as they exist in the present day and they declare that nature has herself imposed insurmountable barriers to the white man's permanent occupation of the territories occupied by black people The degree of difference of temperature, to take one great element in the problem, may be such as not only to prejudice but to prevent the survival of a transplanted race and to render it impossible to establish a durable colonisation

It seems to be pretty well established that the Semitic peoples possess a power of acclimatisation or adaptability to climate superior to that enjoyed by the Aryan races, and among the latter the inhabitants of the South, the Spaniards, the Portuguese, the Maltese, and the Sicilians are superior to those of the North Next to the Jews the Gipsies are the most cosmopolitan The admixture of a foreign blood, too, in a remote past seems to confer a power of resistance to the prejudicial effects of climate, and half castes manage to survive in climates inimical to white men

Climate and acclimatisation have been discussed in numerous treatises and books and have formed the subject of many papers and debates at international and other scientific congresses It is altogether too large a question to be usefully considered here But on a more limited scale and in the restricted sense in which people ordinarily speak of acclimatisation they mean the changes which ensue on the arrival of an immigrant into a new country, the risks to health and the diseases which he has to encounter, and the steps which he can and should take in order to minimise such risks as far as possible

To take a case in point The American nation have entered upon a new, and in a sense Imperial, policy which may be regarded as forming an epoch in their history This brings them face to face with the problem of colonisation and acclimatisation—a problem which we have had to confront long ago and towards the solution of which we have ever since been slowly fighting our way by following on the lines of the best practical measures of hygiene known to us Professor VIRCHOW, in his address at the Congress of German Naturalists and Physicians at

Strasburg in 1885, called attention to a sphere of research in which he alleged that neither the English nor the French had hitherto accomplished much of importance in connexion with the phenomena of acclimatisation—namely, the modifications of the organism, and particularly of the special alterations of each organ The time has arrived, however, when we trust this reproach will no longer be applicable to this country, for it is now fully recognised that scientific inquiry into these subjects and into the nature and origin of the maladies of tropical and sub-tropical climates must go hand in hand with practical measures of prevention "The white man's burden" has proved a tragical one in its drain on the life of the young manhood of this country, notwithstanding the very large measure of success which has attended our sanitary efforts in this direction The Americans having taken up their burden will, no doubt, like the practical people they are, set about their task in a practical way

The four principal factors in the production of climate, according to BUCHAN, are—distance from the equator, height above the sea, distance from the sea, and prevailing winds The equatorial region has the most equable climate, tropical regions have much greater variations of temperature than those near the equator and have a hot and cold or dry and rainy season The isothermal lines of mean temperature do not supply a graduated measure of the effects of temperature on animal life. So far as climate is concerned no single meteorological influence appears, however, to equal the effect of temperature upon health, and its range is of more importance than its mean. The European under a tropical climate suffers from anæmia, diseases of the digestive system, especially of the liver, from malaria, dysentery, typhoid fever, and yellow fever It is not at all easy to say, however, how much of the excess of mortality of Europeans in tropical and sub-tropical countries is simply attributable to climatic heat *per se* and is consequently inevitable and not the effect of malaria, or how much of it is the direct consequence of habits of life and of the neglect of sanitary laws and of personal hygiene Biological researches, too, in relation to health and diseases have revolutionised our views in many respects by showing that many specific diseases are, either directly or indirectly, caused by germs, and investigators have nowadays to be naturalists in addition to their other qualifications Climatic conditions probably constitute an important factor in the multiplication, development, and diffusion of microbic germ diseases, but this is a branch of bacteriology which has hitherto been comparatively little studied As ARNOULD rightly said, the *habitudes alimentaires* of the Anglo-Saxon constitute one of the stumbling blocks to health, but by far the most important is malaria, compared with which the rest are relatively insignificant Mr CHAMBERLAIN was right when he said the other day that "the man who shall successfully grapple with this foe to humanity and shall find a cure for malarial fever and shall make the tropics liveable for the white man will do more for the world and more for the British Empire than the man who adds a new province to the wide dominions of the Queen"

If mosquitoes be the sole vehicle for the conveyance of the malarial parasite to man and the particular kind known as *anopheles* be alone concerned in this traffic Major ROSS, I.M S, may be right in holding that we may eventually stamp out malaria by attacking the easily accessible puddles in which it is bred But we have, as a matter of experience, already gone sufficiently far to have made it evident how efficacious is the application of the simple hygienic precautions adopted by England In proportion as good water, pure air, and suitable food have been supplied to soldiers serving abroad so have the deadly effects attributed to climate decreased or disappeared. Climate appears to require something superadded to it in the way of malaria or the fostering aid of sanitary neglect and improper living to develop its worst effects As regards India, for example, the report of the Royal Commission of 1863 states that prior to 1857 the mortality rate among our troops reached 69 per 1000, whereas the report of the Sanitary Commissioner with the Government of India for 1896 records it as only 14 84 per 1000 of strength There were, of course, many other factors which contributed to this result besides sanitary improvement, still the figures serve to show what may be done and to indicate the directions in which steps can be taken to bring about these results

In order to give a practical turn to our observations we may as succinctly as possible point out what should be aimed at in the case of intending colonists or of a military expeditionary force proceeding for service in a tropical or sub-tropical country, and this we propose to do on a subsequent occasion

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"THE causes of female disease distinctly traceable to the practice of continually standing in shops are so many and various that we have been compelled to take action in the matter" Thus we wrote in 1880 and the publication by us of a black list had considerable effect in ameliorating the conditions under which certain shop-girls worked at that time Since then something further has been done in the way of early closing to mitigate the evils of long standing in shops by affording the girls opportunity for recreation, but there are still firms, we are sorry to hear, who compel their employées to stand all day long, and our statement of nearly twenty years ago with regard to the evils of this practice remains as true to-day as it was then At a recent meeting at St Martin's Town Hall held under the auspices of the Early Closing Association attention was called to the Seats for Shop Assistants (Scotland) Bill and the action of Lord SALISBURY in bringing about its rejection in the House of Lords was severely condemned It is true, as Lord SALISBURY pointed out, that the Bill was too small, relating as it did to Scotland only, but we are at a loss to understand his lordship's analogy when he says that the Bill causes the image of the housemaid to cross his mind, suggests that legislation of this kind if once permitted would have to be extended to households, and asks whether the public would be prepared to have an army of inspectors to examine every house to see that there were a sufficient number of chairs placed at stated intervals so that at each moment of exhaustion the housemaid might sit down in comfort. Lord SALISBURY'S well-known causticity of humour here led him astray Domestic servants are not

placed in the same environment as shop-girls, and arduous as their work undoubtedly is and overstrained as too many of them are by inconsiderate mistresses, and still more by inconsiderate upper servants, yet as a class we think they receive and take opportunities of occasionally sitting down.

We as medical men maintain that sitting accommodation and opportunities for the use of that accommodation are absolutely necessary for shop-girls, especially having regard to the conditions under which they pursue their daily labours The only argument having even the semblance of legitimacy which we have heard put forward in defence of the non provision of seats is that sitting is conducive to idleness, but in this connexion such a premiss cannot be admitted, for an employée would be bound to come forward when an intending purchaser entered the shop and, moreover, the fact that a girl was able to sit down would not prevent her from performing the many duties of packing and folding which might be necessary after the visit of a customer This perhaps does not apply to the heavy departments, but here for the most part men are employed, it does, however, apply to the light or fancy departments where girls serve Again, if the employée were allowed to sit down and rest she would be able to recuperate in some measure the loss of strength entailed by long hours and thus to do for her employer a great deal better work than she is at present able to accomplish The very fact that in many shops she is *not* allowed to sit down is conducive to idleness—idleness of the worst kind the idleness of pretending to do something whilst in reality nothing is being done, and it is noteworthy that many employers encourage this They fondly imagine that their customers can be cheated into the belief that a great deal of business is being done if their employées are made to be seemingly always at work and goods are packed and unpacked, repacked and dusted *ad infinitum* to this end The device is as transparent as it is ludicrous

Can nothing be done to stop this—as we once called it without the least exaggeration or sensationalism—"cruelty to women"? The women who are most concerned dare not complain for fear of losing their situations What, then, is the remedy? The publication of our black list was productive of good results, but the real prevention of this abuse of labour rests almost entirely with the women who deal with the firms who are cruel to their employées There are many women, we know, who, alas, have no sympathy with other members of their sex, and who for the sake of merely passing an idle hour compel shop-girls to show them article after article while at the same time they know that their purchase will ultimately be a small one or even nothing To these we do not appeal, but leave them to be dealt with by the humane, and larger, majority of their sex To the true woman—the woman with feelings for her sisters, the woman of love and sympathy, the true woman in every sense of the word—we appeal for help in this matter If such women would abstain from purchasing at shops where they see that the employées are compelled to work from morning till night without permission to rest from their labours even when opportunity occurs, we should soon see the end of a practice which ruins the health and shortens the lives of many of our shop-girls To such women we feel that we shall not appeal in vain, especially when we remind them that the physical vigour of the future race depends even more upon the health and strength of woman than it does upon the health and strength of man This and the fact that on the health of many of these girls may ultimately depend that of a future generation will, we feel sure, appeal to women as a majority, and their love, their sympathy, and even their loyalty to the race to which we are all proud to belong will stimulate them to the utmost degree to put an end to this "cruelty to women"

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It is, however, to another portion of the committee's report that we wish to draw special attention and that is as regards the employment of the terms "tubercle" and "tuberculous" These two words, together with another term, "tubercular," have been very loosely used, many, if not most, writers apparently considering them to be entirely synonymous For our part we have for years past endeavoured very carefully to differentiate in the use of the adjectives "tuberculous" and "tubercular," meaning by the former the lesions caused by the disease produced by the tubercle bacillus of KOCH, and by the latter a formation presenting the physical appearance of a nodule not so caused We especially welcome, therefore, the recommendations of the committee as expressed in their report that the word "tubercle" should no longer be used as a general anatomical term, but should be only employed as a designation of the nodular lesions produced by the tubercle bacillus To prevent ambiguity, however, it might be still better if all lesions having the form of "tubercles" were called generally "nodules," those produced by KOCH'S bacillus being distinguished as "tuberculous nodules," and if the nodules produced by other causes were in like manner distinguished by a prefix indicative of their cause We notice that the term "tubercular" does not appear in the report and we trust in future that its use as a synonym of "tuberculous" may be abandoned Medical phraseology is already sufficiently copious and any redundant or ambiguous words or phrases may well be obliterated. Many committees have from time to time been appointed by various societies, some have done good work, others have so delayed the issue of their reports that their suggestions have greatly lost their value owing to the lapse of time, whilst the valuable efforts of others have never been known beyond the actual members of the committee The committee, however, to whose report we have briefly referred have done their duties promptly and well and deserve the thanks not only of the society of which they were representatives but of the whole scientific world

Annotations.

"Ne quid nimis."

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THE Protectorate of British Central Africa, from its inception to its completion, is the work of two men, both of them medical missionaries, Dr David Livingstone and Dr James Stewart It is a magnificent contribution to the great work of which the closing century has seen the beginning and of which the coming century will see the development—the reclamation of the Dark Continent to its place in the evolution of humanity Religion and medicine, not in antagonism, but going hand in hand, *viribus unitis*, must be credited with this achievement, and it is to the honour of both professions that they freely acknowledge the services which each owes to the other in the common result In THE LANCET,[1] in commenting on the great meeting held in Glasgow for the promotion of medical missions, we dwelt on this harmonious coöperation of religion and medicine and we pointed out how the British Empire, in its policy of expansion, enjoys through this coöperation an advantage shared in equal measure by no other rival True, Cardinal Lavigérie, in his splendid work for the civilising of the Sahara, did not neglect the healing art as an instrument towards that end But his organisation of the Christian Brothers, in its preponderance of the proselytising element and in its preference of the military to the medical arm, was far inferior to its British counterpart, as indeed is already proved by results The more the civilising power keeps the display of force in the background and makes moral suasion its distinctive method, the more its success in winning over the aborigines and in welding them into the higher social organisms which it seeks to consolidate To impress such peoples with the superiority of the new to the traditional order the effort of the missionary is accelerated incalculably by his knowledge of Nature and her forces, by his utilisation of these to meet existing wants, above all, by his power to exorcise epidemic disease and to avert from its hereditary victims "the shaft that flies in darkness" Medicine, which is simply nature study in its highest, most complex, and most refined form, represents that moral agency at its acme and impresses the savage mind with corresponding power and effect This truth was well known to Dr Livingstone, as may be read even between the lines of his most purely missionary publications, and it was thoroughly grasped by Dr Stewart, "his assistant and successor" Trained for the Church, after previous qualification in the arts curriculum of Edinburgh University, Stewart at this stage was attracted by Dr Livingstone's "Missionary Travels," and as a step towards following in his footsteps he added nature-study in its medical department to his "armamentarium" Having graduated M.D he threw himself into missionary enterprise, the peoples of East Central Africa being his first objective The record of

[1] THE LANCET, March 18th, 1899, pp. 755.

his career from 1860 onwards is one of the most interesting and inspiring of the century—an example of how far and to what altitudes the religious enthusiast reinforced by nature-study can attain Another coadjutor in his work of establishing the East Central African Mission—"Livingstonia," as he called it from its original promoter—was Dr Robert Laws, also a graduate in medicine as well as theology, and their conjoint work, congenially reinforced, soon became the parent of other enterprises Another Scottish Mission, another English Mission, and two German ones followed, and "the five have created the vast colony of British Central Africa and Rhodesia stretching from the Zambesi north to the Congo Free State and Lake Tanganyika" So writes a highly competent narrator of Dr Stewart's life-work in the *Scotsman* of May 18th and from the same authority we learn that the medical missionary is in the day now passing proving himself—on the lines of his predecessors—the pioneer of political, commercial, and humanitarian developments to which no other colonising power can produce anything equal or even approaching Railway extension is soon to follow—a resource for which the Foreign Office has been petitioned by the British Central Africa Chamber of Commerce The imagination loses itself in forecasting the outcome of this splendid example of British science, British philanthropy, and British energy all working together with missionary effort Already we hear of "another Lovedale" where "the choice youth of the 11,000 natives under instruction in five centres are trained to be captains of labour, catechists, printers, teachers, telegraphists, and pastors of self supporting churches" It is not difficult to understand the enthusiasm which such results can arouse and maintain in the missionary explorer Dr Stewart himself, now 68 years of age and Moderator of the Free Church General Assembly, contemplates, we understand, a return to the scenes of his humanitarian conquests, and will take with him coadjutors reinforced from the youth who are smitten with the generous contagion of his spirit Amid the complaints echoed from every quarter of the old European state-system as to the over stocking of the professions here is a source of relief from the exhaustion of competition The young man who as a practitioner in some industrial centre can hardly make ends meet may transfer the struggle to other and not less noble fields—fields remunerative in every sense and teeming with illustrations of the truth that nature-study in its highest form and in the power which it confers is never thrown away

AN ACT TO REGULATE DISPENSARIES IN NEW YORK.

THE *Medical Record* of New York of May 6th devotes a leading article to praise of "a new Act to regulate the conduct of dispensaries" The abuse of these institutions seems to have corresponded very much to the abuse of the out-patient department of our hospitals and to have amounted to "a glaring scandal" By the Act all dispensaries, whether public or private, are placed [illegible] the control of the State Board of Charities Power is [illegible] given to the same body of licensing or revoking the lic[illegible]or of dispensaries, but this does not apply to those alre[illegible]m corporated The licence in this case can only be rev[illegible] by appeal to the Supreme Court The State Board is also charged with the duty of drawing up regulations for the conduct of the dispensaries to which the latter are required strictly to adhere The law further enacts that any person obtaining medical relief by false pretences shall be guilty of a misdemeanour and liable to a fine of not less than 10 dollars and not more than 250 dollars Everything will depend on the working and the application of this Act and we shall welcome all good reports on the subject by our contemporary It is to be hoped that those who are responsible for the management of our medical charities will take note of this new departure in the United States We sincerely trust that reform will come in our country without an appeal to legislation But it is high time that the committees of our dispensaries and hospitals should begin to show that voluntary action is sufficient to remedy the abuses complained of

THE SCANDAL AT THE LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES

THE recent *dénouement* at the Liverpool Hospital for Cancer and Skin Diseases points to a very undesirable condition of affairs as existing at that institution As some of the matters in dispute will probably be the subject of investigation in a court of law we confine our observations to facts which have already become public property The staff of the hospital has hitherto consisted of three medical officers and three assistant medical officers, the former being Mr J D Crawford, Dr J Stopford Taylor, and Dr William Whitford At the end of the year 1898 a sub committee of five members of the general committee was appointed to inquire into the internal management of the hospital The three medical officers received invitations to offer suggestions as to any improvements which they considered to be necessary for its better management and to send any specific complaints which they desired to make Dr Taylor and Dr Whitford alleged against Mr Crawford that private patients were sent by him to the hospital for the purpose of having their medicines made up at the expense of the hospital They also alleged that he had used the hospital in other ways for his own advantage and that he had behaved in an indecent manner to some of the nurses Mr Crawford also made certain allegations against Dr Whitford, not of a serious nature The sub-committee met on several occasions and finally reported that the charges made against Mr Crawford had not been proved and they recommended a revision of the medical staff The committee thereupon called upon Dr Taylor and Dr Whitford to resign their appointments These two gentlemen declined to accede to the request of the committee who referred the matter to the general body of the subscribers Prior to the subscribers' meeting a general meeting of the Liverpool Medical Institution was summoned when a resolution was proposed protesting against the dismissal of Dr Taylor and Dr Whitford After considerable discussion the previous question was moved and carried It was felt by a considerable body of the members that the society should not pledge itself to take part in matters which were still *sub judice* No official opinion on either side was expressed A memorial signed by 108 practitioners in Liverpool, comprising a number of the leading members of the profession, was addressed to the subscribers setting forth the opinion of the signatories that, in the interests of justice and for the welfare of the hospital, an independent inquiry was demanded Dr Taylor and Dr Whitford at the same time sent to the subscribers a pamphlet containing an exhaustive criticism of the sub-committee s report in which they alleged that the committee had ignored several important points of evidence A general meeting of the subscribers was summoned for May 10th to consider the report of the committee calling for the resignations of Dr Taylor and Dr Whitford After a heated discussion the action of the committee was sustained by 44 votes to 20 An amendment moved by Mr James Lister "that this meeting of subscribers and donors, being dissatisfied with the result of the investigation of the committee of the hospital, desire that the Lord Mayor be appealed to to appoint a committee to inquire into the charges, and that the Lord Mayor be requested to ask the committee to inquire into the matters raised in the

report," was defeated by 45 votes to 33 Mr Lister said he had already spoken to the Lord Mayor who had expressed himself willing to undertake such a step if requested A proportion representing 42 per cent of the subscribers present were thus dissatisfied with the report of the committee It is also alleged that 36 individuals had qualified as governors at the minimum amount a few days before the date of the meeting in order to vote on the proceedings Should this allegation prove to be correct the laws of this institution are in need of drastic reform. At the majority of the Liverpool charities the rule is enforced that a governor or trustee cannot vote in general meeting unless his subscription shall have been paid prior to a period of three months The rule is obviously a wholesome one, framed for the purpose of preventing abuse The resignations of two out of the three assistant medical officers have also been announced as well as that of the matron The charity is clearly in an unsatisfactory condition and we hope that the subscribers will demand an independent inquiry

A SCHOLARSHIP FOR MEDICAL RESEARCH

THE Technical Education Board of the London County Council is coöperating with the Asylums Committee in offering a valuable scholarship of £150 a year tenable for two years for students of either sex (preferably qualified practitioners) to enable them to carry on investigations into the preventable causes of insanity The lady or gentleman appointed to the Scholarship will carry on investigations in the pathological laboratory attached to Claybury Asylum A similar scholarship has been held during the past two years by Dr J O W Barratt, who has carried on valuable original investigations into the causes of insanity, many of which will be published in the Archives of the Pathological Laboratory of the London County Asylums, the issue of which is imminent, under the editorship of the director, Dr F W Mott Dr Barratt has recently been appointed Pathologist at the Wakefield Asylum and the scholarship which he has held is therefore vacant Applications should be made to the secretary of the Technical Education Board, 116, St Martin's-lane, W C, not later than Wednesday, June 7th

A VACCINATION CASE

AN action of some importance to the medical officers of prisons and other public institutions has been decided in Glasgow The case was at the instance of John Lamb Thomson against Mr J Devon, medical officer of Her Majesty's prison, Glasgow, claiming £500 as damages for assault alleged to have been committed on him by Mr Devon on Dec 28th, 1897, when Thomson was a prisoner in Duke-street prison, Glasgow The Sheriff Substitute, before whom the case was first considered, heard a proof lasting four days and thereafter gave judgment in favour of the defender and found him entitled to expenses The pursuer then appealed to Sheriff Principal Berry who has adhered to the decision of the Sheriff Substitute and has found the appellant liable in the expenses of the appeal In a note Sheriff Principal Berry states that the question of liability in damages, either substantial or nominal, depends upon whether Thomson is to be held to have consented to vaccination by Mr Devon. If he consented there was no assault, but if he did not consent there was an assault for which there would be liability in damages though the amount of these would be for further consideration There was an original plea by the pursuer of carelessness or negligence on the part of Mr Devon, but that was not urged before the Sheriff Principal, and the only question was one of assault. It was contended for the pursuer that he was led to suppose that his vaccination was a part of the prison discipline and that though he might not have openly objected to the operation there was merely submission to authority on his part as distinguished from consent necessary to relieve the medical man from liability for assault On the question of fact the Sheriff-Principal had little hesitation in agreeing with the Sheriff-Substitute that the pursuer was not under the delusion that the operation was required by the rules of the prison and that Mr Devon had made no such representation to him The pursuer, indeed stated that he was vaccinated without knowing and that it was done before he was aware of what was going to be done, as he supposed he was about to be shackled The pursuer's explanation had struck the Sheriff-Substitute as very like either an afterthought of his own or an outside suggestion and the Sheriff Principal agreed that Thomson knew well enough what was afoot Mr W J Begg, the secretary of the local Anti-Vaccination Society, acted as agent for Thomson, while the solicitor and clerk to the police department of the Glasgow Corporation acted for Mr Devon

THE PHARMACOLOGY OF CHLORIDE OF LIME

IN the *Archives de Médecine Navale* for April Dr Paul Petit calls attention to the merits of chloride of lime as an external application in surgical, ophthalmic, and gynæcological practice and also as an injection in affections of the rectum and bladder In the absence of the substances usually employed, or, as he thinks, preferentially, we possess in this white powder which is universally procurable a remarkably efficacious and absolutely harmless antiseptic Hitherto chloride of lime has been almost exclusively relegated to the sweetening of latrines and such like service, but it amply deserves elevation to more noble usage In times gone by Labarraque's fluid (liquor sodæ chlorinatæ, B P) was largely utilised by medical men and to this day there are progressive practitioners who, nevertheless, have recourse to the old fashioned medicament in the treatment of crural ulcers, syphilides, throat affections with false membranes, blennorrhagia in the male, purulent ophthalmia, &c, and yet the untitled solution of chloride of lime, which is 10 times more active than its congener and does not, like it, irritate the tissues in the least, is totally ignored According to Chamberland and Fernbach a solution of chloride of lime containing 77 per cent of chlorine to the litre is very energetic, acting more efficaciously on moist germs than Javel water or Labarraque's fluid, and, in fact, possessing about the same power as a 1 per cent. solution of corrosive sublimate The antiseptic properties of chloride of lime do not depend upon the strength of the solution, being at their maximum when the chlorine exists in the above proportion, but if desired a more concentrated form may be employed without any fear of bad results as Calmette's experiments against the venom of snakes have shown conclusively In common with most of the chemical disinfectants chloride of lime acts best when warm and should before being used be heated up to from 110° to 120° F In conclusion Dr Petit sums up his case as follows: a solution of one part of chloride of lime to 120 of water is very powerfully antiseptic ten times more so than Van Swieten's liquid, and since it is neither toxic nor caustic it may be regarded as absolutely inoffensive Moreover chloride of lime not only cleanses but softens albuminoid matter, instead of converting it into tough coagulum. The cost being infinitesimal it may be freely used in operative surgery for disinfecting large objects such as basins and jugs, tables, &c, and also for washing floors and walls The only objections to chloride of lime are its clinging smell and its corrosive action on metal. Washing the hands in a weak solution of muriatic acid will remedy the first defect and a little attention the second Incidentally, Dr Petit remarks that premises before undergoing

disinfection should be moistened because germs when moist are much less resistant than in the dry state In this connexion the following quotations from a whilom authority[1] will be of interest "As an antiseptic, Labarraque preferred the hypochlorite of soda, on the ground that by the process of disinfection it becomes chloride of sodium, which is not a deliquescent salt, whereas the chloride of calcium generated by chloride of lime, attracts water from the atmosphere, and thereby furnishes one of the conditions (viz, moisture) necessary to the putrefactive process Hence, in his opinion, while chloride of lime will serve equally well for mere disinfection, chloride of soda is preferable where we wish at the same time to prevent a renewal of putrefaction"

THE CARLTON HOTEL AND THE ST JAMES'S VESTRY

IT may be remembered that Messrs Waring, Limited, were summoned recently by the St James's Vestry (as the local sanitary authority) for having disregarded the by laws made by the London County Council under the Public Health (London) Act, 1891 The offence consisted in fitting up the sanitary arrangements of the new Carlton Hotel in Pall Mall in such a way that nine soil pipes were placed inside instead of outside the structure For the defence it was urged that it would be unreasonable to compel Messrs Waring to pull down half the structure—a very magnificent building which had cost nearly half a million sterling—to alter the admitted defect, and it was submitted that a small penalty would meet the case with the understanding that future proceedings should not be taken against the hotel Mr De Rutzen adopted this view and imposed a fine of £2 with £10 10s costs Mr Mark Judge has now written to the London County Council to say that if the St James's Vestry have endorsed the view put forward in their name before Mr De Rutzen they have made a default in doing their duty That he is right strictly speaking no medical man we think can deny It is bad that an enormously expensive and otherwise perfect building should be half destroyed at an immense loss of capital and labour But it is very bad that the soil pipes should be in the wrong place We should certainly feel bound to support the London County Council if in the dilemma they placed the interests of public health first and took steps to insist upon the observance of their by law

A MEMORIAL STATUE TO SIR THOMAS BROWNE

"THE opinion has long been held and the feeling often publicly expressed both locally and elsewhere, that some permanent memorial of our great philosopher and eminent writer, Sir Thomas Browne, M D, should be erected in the city of Norwich where he resided for forty six years and in which he died in 1682 During his lifetime and shortly after his decease his chief works, especially the 'Religio Medici,' 'Christian Morals,' 'Vulgar Errors,' and 'Urn Burial,' passed through many editions, the first of these through no less than 13 in England and 11 in foreign countries, and now after the lapse of more than two centuries they are again being re-edited and widely read and studied It is not too much to say that they are regarded with ever increasing appreciation and with a recognition of the immense power and profound learning displayed in them" This passage is taken from a circular which is being disseminated by a very influential general committee in behalf of a fund to erect a statue in Norwich to the famous medical philosopher, and in another column of THE LANCET will be found a letter from Sir Peter Eade bringing the matter prominently to the notice of our readers The movement, to which we have already referred, is one that has our heartiest sympathy. Other men of like eminence in literature, art, and science have had their memories perpetuated in this way in the localities associated with their names, and the time has arrived when the eloquent author of the "Religio Medici" should be similarly honoured The General Committee announce that a most suitable position for the statue has been suggested in the Haymarket, Norwich, near the site of the house in which Sir Thomas Browne resided for so many years, and the church of St. Peter Mancroft in which he was buried Norwich is obviously the most appropriate place for the proposed statue and the first appeal for funds was made to the inhabitants of Norwich and its neighbourhood, but it is the proper desire of the committee that the memorial should not be merely a local one Sir Thomas Browne made Norwich his home, but he was not, strictly speaking, a native of the quaint and lovely old eastern capital, for he was born in London and was educated at Winchester His reputation, however, is world wide, not local, and as admirers of his writings are found wherever English is spoken contributions towards his statue should flow from all sources The cost of such a statue as is proposed would vary from £800 to £1200, according to its nature, and contributions will be received by the acting honorary secretary, Mr F R Eaton, King street House, Upper King street, Norwich or at the Bank of Barclay and Co, Limited, Norwich

SARCOMA OF THE TESTICLE

THE *American Journal of the Medical Sciences* for May contains a useful paper on this subject by Dr G M Kober based upon six cases which he had observed and upon all the cases which he could find in German and English literature reported in the last 18 years, making 114 cases in all Injuries such as blows, contusions, and squeezes have been regarded as exciting causes, in 32 cases there was a distinct history of traumatism In 18 cases the disease developed in a retained testicle or when the descent had been delayed, in one the retained testicle had been pressed on by a truss, in two there was a syphilitic history, in one there was a history of metastatic orchitis from mumps As to age, 9 3 per cent of the cases occurred before the age of 10 years, none between 10 and 15 years, 5 6 per cent between 16 and 20 years, 71 per cent. between 20 and 50 years, and 14 per cent after 50 years Of 93 cases in which the seat of disease was stated the right testicle was affected in 47 the left in 41, and both testicles in five Sarcoma, like carcinoma of the testicle, usually develops rather rapidly, but in a few cases very slowly Out of 99 cases, the tumour was of congenital origin in five, from a few weeks to six months' duration in 28, from seven to 11 months in 14, from one to two years in 24, from two to five years in 18, of six years' duration in two, of 15 years' in two, of 16 years' in one, of 20 years' in three, of 23 years' in one and of 26 years' in one In most cases the patient observed a gradual but painless enlargement of the testicle for an indefinite time followed by a period of a few weeks in which the tumour grew very rapidly with dull aching, sometimes lancinating, pain The tumour retains the shape of a normal testicle and is therefore often mistaken for orchitis It is only when the tunica albuginea is perforated that bosses appear The tumour is usually firm at first, later it is soft and elastic, and even fluctuating A remarkable feature is that not infrequently there is apparent quiescence and in some instances actual diminution of the tumour (from absorption of fluid) Secondary deposits in the cord are not frequent, but implication of the lumbar and iliac glands is common.

[1] The Elements of Materia Medica and Therapeutics by Jonathan Pereira, M.D F R.S and L.S., London, 1849.

The diagnosis between sarcoma and orchitis is by no means easy, in both there may be history of injury, and as a matter of fact many sarcomata develop after orchitis In all doubtful cases an exploratory incision should be made The prognosis is grave, especially in children and in rapidly growing tumours Of 113 cases operated upon there was no history of the ultimate result in 37, 23 patients died within five months from metastasis in different organs 11 lived for periods ranging from seven to 12 months, five for periods of from 16 to 24 months, and two for three years, dying from secondary growths Of the 35 remaining cases 18 patients were alive at periods of from one to 12 months after the operation, two 13 months after operation, four from 21 months to three years, two four years, three six years, one eight years, one nine years, two 10 years, and one 15 years Extirpation should be at once performed without regard to the malignancy of the tumour, since Adler has reported a case to the Berlin Medical Society[1] in a man, aged 24 years, whom he castrated on May 11th, 1892. The tumour proved to be a cystadenoma The patient died in September, 1893, from metastasis in the lungs of the same character and not a trace of carcinoma or sarcoma could be detected

SKIAGRAPHY AND STEREOSCOPY

MR. MACKENZIE DAVIDSON gave an interesting demonstration on May 15th, at the Camera Club, of some new departures in x ray work and their application to stereoscopic vision Two skiagrams are taken from slightly different points of view and these are combined as a stereoscopic picture by being reflected to the eye by two mirrors placed at right angles, each being at an angle of 45 degrees to the plane of the skiagram By placing the eyes close to the line of junction of the two mirrors a stereoscopic picture is seen Mr Davidson also explained his method of localising foreign bodies and stated that 100 cases of foreign bodies in the eye had now been localised in this way This method consists in taking a known point and measuring the three coördinates of this point from three planes at right angles to each other The three coördinates of the foreign body are then measured by the method of the crossed threads—also Mr Davidson s idea. Having got these data we can by subtraction decide how far to right or left of the known point the foreign body lies, also the vertical distance and the depth in the eyeball parallel to the visceral axis The "known point" consists of a piece of lead wire fixed by plaster to the patient s lower eyelid. For the purpose of measurement two lines at right angles are made on the plate by placing two wires over the sensitive plate

"DEATH FROM TIGHT BOOTS"

SENSATIONAL versions of medical cases are only too frequent in the newspapers and it is perhaps in this department of journalism that the descriptive paragraph writer appears to least advantage A death from tetanus in the Manchester Royal Infirmary has recently been made the basis of an article ascribing the fatal issue to the wearing of tight boots, a species of picturesque exaggeration which recommends itself to a certain class of readers, and was, no doubt by the author of this literary effort considered to be a happy inspiration Tight boots are productive of much discomfort, immediate and remote, but they do not cause death, they have even been described by a humorist as a blessing "because they make a man forget all his other miseries" Anyhow they will continue to be worn so long as it is fashionable to admire a small foot Information kindly supplied by the resident surgical officer of the Manchester Royal Infirmary shows that the only unusual features of a fatal case of tetanus were the trivial nature of the original lesion and the unfortunate coincidence of the attack with a surgical operation undertaken for another purpose The patient was a man, aged 26 years, who wished to enter the police force and was admitted to the infirmary to undergo operation for the radical cure of a varicocele Although very tall and rather delicate-looking he seemed in every other respect to be perfectly healthy The plexus was excised and the wound was sealed with celloidin On the sixth day after the operation the patient complained of pain in the neck and jaws The wound was examined and it was found to have soundly healed without suppuration On thorough overhauling a small, barely healed sore was discovered on the right great toe, and on closely questioning the patient he admitted that 14 days previously this had been caused by the rubbing of his boot during a long walk The treatment consisted in large doses of chloral and injections of antitetanic serum, but the temperature (which had been normal since the operation) rose, the convulsions became more severe, and the patient died 24 hours after the first declaration of symptoms Bacteriological examination of the operation wound and of the sore on the toe gave a negative result

[1] Transactions, vol. xxv, pp. 154-66.

THE SALE OF FOOD AND DRUGS BILL.

COMMENDABLE progress has been made with this Bill by the Standing Committee on Trade, and the Bill is down for consideration in the House of Commons on June 1st, but it is doubtful whether it will obtain a hearing then on account of some important political measures which are down as orders on the paper for the same day The amendments in the new Bill deal chiefly with invoices as warranties, the sufficiency of the analyst's certificate as evidence, the correct labelling of mixtures, and increased penalties for offences There is no indication, however, of the appointment of a Court of Reference, but we understand that Sir Charles Cameron intends to move the adoption of some such clause Again, the question of preservatives has yet to be decided by a Departmental Committee, so that it is doubtful whether the Bill will be ready for consideration on the date proposed

THE LATE CAMPAIGNS IN THE SOUDAN AND ON THE NORTH-WESTERN FRONTIER

THE historical events connected with Khartoum and General Gordon naturally gave the late campaign prominence in the public eye, the clear and comprehensible policy of the expedition and the important political considerations involved in its successful issue, as well as the almost scientific precision with which it was carried out, afford also a sufficient explanation of the absorbing interest which it created Public attention can only occupy itself with one subject at a time and it was altogether diverted from the campaign on the North Western frontier of India to the events which were taking place in the Soudan As regards the size and nature of the undertaking however, and the difficulties which had to be overcome the two expeditions are not to be compared with one another Opinion was, and still is, much divided as to the political necessity or wisdom of the Indian campaign for one thing and, for another, it was much farther off from this country and its nature did not admit of any large, brilliant or conclusive engagements being fought, but the military historian of the future will not fail to recognise that Sir William Lockhart and his troops accomplished an enormously difficult undertaking such as probably no other power in the world could have successfully carried out A supplementary gazette has recently been published which includes the names of many officers who had been omitted from the list of honours previously

conferred for the North Western Frontier Campaign, It will be remembered that a very large and comprehensive medical and hospital service had to be organised for that expedition, that the medical officers had very laborious and trying work, and that the results accomplished were eminently satisfactory It was very natural, therefore, for the members of both the medical services in India to have expected that their labours would have been fully recognised, but we cannot say that such has been the case and a very general feeling prevails that the medical officers of the expedition have not received that amount of recognition to which they were justly entitled The vast amount of responsibility and labour which must have devolved upon the Surgeon General of Her Majesty's forces and upon the Principal Medical Officer of India, for example, does not seem to have been recognised or taken into account in the distribution of rewards and honours

PHTHISIS ON SHIPBOARD

TRAVELLERS are indebted to a gentleman who recently made the voyage from South Africa to England for a timely and important suggestion which appeared in the pages of a contemporary Shortly after leaving the Cape he discovered that his fellow passenger in the same cabin was advanced in phthisis Naturally and very properly he suggested that he might be provided with a berth elsewhere, but was informed that the existing arrangement could not be altered. He was consequently obliged to sleep in the saloon He afterwards found that two other passengers were also phthisical Under the circumstances it is not surprising that he makes some very pertinent observations respecting the duty of shipping companies with regard to isolation and disinfection in similar cases There cannot indeed be any question as to the danger to others which these entail It is true that phthisis is not infectious after the same manner or in the same degree as the exanthemata It would be unreasonable, even cruel, to refuse a sufferer from this disease that opportunity of transit over sea which perhaps affords him his only chance of recovery But, on the other hand, we now know that the spread of tuberculous disease is largely attributable to the inhalation of particles of dried sputum distributed in the atmosphere, and it is easily conceivable that phthisical persons are not always careful about the disposal of their expectoration Such being the existing conditions a measure of sanitary precaution is no more than necessary, and it ought, if it is to be effectual, to include the medical examination of intending passengers by the ship's surgeon, the separate accommodation of any who are phthisical, the regular use and disinfection of special spittoons, the disinfection of handkerchiefs and soiled bed linen, and a final sanitary cleansing of the cabins occupied during the voyage when it is over A certain amount of method and some personal exertion would be needed to carry out these arrangements, but there should be little or no monetary loss to the shipping companies, while there would certainly result a gain in security and an increase of confidence on the part of the travelling public

THE Cavendish Lecture of the West London Medico Chirurgical Society will be delivered before the society on Friday, June 16th, at 8 30 P M , in the Town Hall, Hammersmith, W., by Dr William Osler, F R C P Lond , F R.S., Professor of Medicine in Baltimore, who has taken as his subject "Cerebro-spinal Fever"

THE Committee of the Brompton Hospital for Consumption and Diseases of the Chest have received a donation of £2500 from Sir Theodore Martin, K C.B , in order to dedicate a ward in memory of Lady Martin, better known to the world as Helen Faucit.

THE formal opening of the International Congress for the Prevention and Cure of Tuberculosis took place in Berlin on Wednesday, May 24th The proceedings were inaugurated at the Reichstag in the presence of the Empress of Germany.

A CRITICISM ON THE DECISION IN HUNTER v CLARE

BY JAMES WILSON, BARRISTER AT LAW

[THE great importance of the issues raised in the case of Hunter v Clare will make the following legal criticism on the recent decision of the Divisional Court interesting to our readers It will be seen that Mr James Wilson does not wholly commend the interpretation of the law as laid down by Mr Justice Lawrance and Mr Justice Channell There is no doubt that the matter bristles with difficulty, but we hope that our readers will consider the case strictly on its merits and will not allow any prejudice either for or against the Society of Apothecaries to influence their opinion either of the action of the General Medical Council or of the justice of the decision of the Divisional Court]

The recent decision of a Divisional Court (Lawrance and Channell, JJ) in the case of Hunter v Clare cannot, it is submitted, be accepted as a final determination of the law in respect to the use of medical titles by duly registered practitioners under the Medical Act of 1886 The court was asked in this case to decide whether a Licentiate of the Society of Apothecaries of London, being duly registered on the Medical Register as such in accordance with the provisions of the Medical Act of 1886, could be convicted under Section 40 of the Medical Act of 1858 for styling himself a "physician"

The point being raised for the first time in respect to a Licentiate of the Apothecaries' Society registered under the 1886 Act there was no direct authority bearing on the question to guide the court In the absence of authority judges not infrequently find safety in a narrow interpretation of the law and so it seems to have happened here It is an elementary rule of construction that words and phrases in a statute are to be taken as used in their technical meaning if they have acquired one and in their popular meaning if they have not, with this qualification, however, that technical words in statutes dealing with matters relating to the general public are to be construed *ut loquitur vulgus*—that is, according to the common understanding and acceptation of the terms Mr Justice Channell narrowed down the question which the court had to decide to one of determining whether the word "physician" was used in a technical sense or in a popular sense in Section 40 of the Medical Act of 1858 "If physician there means," said the learned judge, "simply a person who is duly qualified in law to practise in physic then it seems to me this appellant is a physician within that meaning of the word, because although it was not so at one time he is now by being a Licentiate of the Society of Apothecaries entitled to practise medicine and surgery, and if the word 'physician' in Section 40 is used in a popular sense I think one would be bound to say that he is entitled to practise in physic in a popular sense at any rate Even if there be in any sense a distinction between 'physic' and 'medicine' I do not think there is any such distinction in the popular sense Consequently, if 'physician' in Section 40 means—I do not say 'medical practitioner' as that expression, too has a sort of technical sense—a person who is legally entitled to act as doctor, using the word 'doctor' in the popular sense and not in the technical sense of doctor of medicine, then I think the appellant by the qualification he has got would be entitled to call himself a physician Prior to the passing of this Act of 1858 'physician' was commonly used as applying to what was the highest grade of medical practitioners and having regard to that fact I think it was so used in this Act and if we look through the Act we find confirmation of that view There is some confirmation of it in the fact that most of the words used

such as 'physician,' 'doctor,' 'licentiate of medicine,' and so on, have application to the specific bodies that are entitled to give qualifications It seems to me that the word 'physician' in that Act had got somewhat of a technical sense and that it in point of fact was a word used as importing a particular grade of medical practitioner In that special sense I do not think it is correct to say that a Licentiate of the Society of Apothecaries is in fact a physician" The learned judge was careful to add that he arrived at this conclusion "not altogether without doubt." There seems ample justification for this doubt. The title "physician" is one of shifting connotation varying with times and places At the date of the Act it had one connotation in England, another in Scotland, and another in Ireland It is not conformable to reason nor can it be supposed to have been the intention of the legislature that in an Act which was to apply to the whole of the United Kingdom the word physician in the Penal Section (the 40th) was used in the sense which law and usage recognised as applicable to the area under the supervision of the Royal College of Physicians of London [1]

It is well known that this College in Henry VIII's reign got the whole domain of medicine under its control, obtaining the sanction of an Act of Parliament (32 Hen VIII c 40) for the doctrine that the "science of physic doth comprehend, include, and contain the knowledge of surgery as a special member and part of the same" Even as late as 1861 the College maintained against the Society of Apothecaries the right which it had not seen fit to exercise previously to create Licentiates who could compound and supply drugs for gain to their patients—in short, to act as apothecaries. (Attorney-General v Royal College of Physicians, 1 J and H 561.)

Thus in the evolution of the medical profession what the physician claimed by virtue of Henry VIII's legislation the apothecary starting at the bottom of the medical ladder as a humble drug seller, is now entitled to claim by the statute of 1886 So that even if "physician" be used in Section 40 of the Act of 1858 to denote the highest grade of medical practitioner it is submitted that the legislature, by making it a condition precedent to registration that all licensees, whether they come from a College of Physicians, Surgeons Apothecaries, or other licensing body shall possess such knowledge and skill in medicine, surgery, and midwifery as to guarantee the efficient practice of these three essential branches of their profession has virtually made obsolete for persons registering after 1886 the grading of physician, surgeon, and apothecary, as understood before that Act Therefore, it would seem that the court should have approached the consideration of the question which it was asked to decide from a different point of view to that taken—viz, was the conduct of the appellant, Mr Hunter, in styling himself a physician within the mischief prohibited by Section 40 of the Act of 1858 A short consideration of the general scope of the Act to which its preamble is the key enables one to answer with reasonable certainty that it was not. The simple recital in the preamble is "Whereas it is expedient that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners." Thus the Act would appear to have been passed rather in the interests of the public than with a view of protecting the separate interests of the medical profession. The legislature seems to have assumed that if a statutory distinction were drawn between registered and unregistered practitioners the public might be trusted to protect itself against unqualified practitioners To this end the Medical Register the pivot of the Act, was established and provision made for its efficiency Sections 32 33 34 35 and 37 confer privileges and immunities on registered practitioners, Section 36 disqualifies unregistered persons from holding certain public appointments, and the 40th Section is intended to make registration effective for its purpose by imposing a penalty on all such persons as falsely and wilfully hold themselves out to the public as registered under the Act or who assume such titles or descriptions as would imply that they were so registered

The decided cases it is true show that if a person registered in respect to one qualification describes himself as if he was registered or entitled to be registered under another qualification he becomes liable to the penalty In these cases, however, the judges based their decisions on the ground that such persons deceived the public and thus frustrated the policy of the Act—e.g, Baron Bramwell in delivering judgment in Ellis v Kelly said that Section 40 of the Act of 1858 "is intended to protect the public from being imposed upon by persons untruly representing themselves to be legally qualified medical men It appears to me that if any person wilfully and falsely called himself 'M D' he would be liable to a penalty, though he was in reality a Member of the College of Surgeons or of the Apothecaries' Company and was so registered" (3 L T Rep, N S, 331) Again in the more recent case of Regina v Baker (17 Cox, 575), the late Lord Chief Justice Coleridge approved and adopted the language of Baron Bramwell above quoted, and added "It is obvious that there are different qualifications and examinations for the different heads of medical practice, and that those to which a doctor of medicine must be subject and upon which he must enter are quite different from those of an apothecary and that calling yourself a physician because you are an apothecary is a fraud upon the public and the very thing this Act of Parliament was intended to prevent. It was intended by the legislature that persons who employ a medical practitioner should know what sort of examinations he has passed and under which of the various heads of medical practice he is to be classed"

This language in the altered circumstances of registration under the 1886 Act would be wholly inapplicable to Mr Hunter's case. That Act (Section 2) made it obligatory that all candidates for registration should pass a qualifying examination in medicine, surgery, and midwifery and in Section 3 it is laid down that 'the standard of proficiency required from candidates at the said qualifying examination shall be such as sufficiently to guarantee the possession of the knowledge and skill requisite for the efficient practice of medicine, surgery, and midwifery and it shall be the duty of the General Council to secure the maintenance of such standard of proficiency as aforesaid" by the methods provided in the Act, methods which imply that all candidates, whether graduates in medicine from the universities or licentiates from the various licensing bodies, are to be treated *qua* registration on a footing of equality It was the intention of the framers of the Act to remedy the evils resulting from single qualifications and a multiplicity of examinations of widely unequal value Those evils were thus described by Sir Lyon Playfair in moving the second reading of the Bill "Through any of these 19 [licensing] bodies a medical man could come upon the Register and might practise and he might receive 50 or 60 titles and licences to practise from these bodies and the bewildered public had no idea of what was the value of these—whether they signified a sufficient qualification, which were good and which were bad. A man might pass a College of Surgeons and go down into the country and attend medical cases such as measles or scarlet fever without ever having passed a medical examination, or he might take a licence by a College of Physicians and cut a man's leg off without having passed an examination in surgery and both might go down to the country and without knowing anything about it might practise in a thickly populated district midwifery" (Hansard, vol ccov, p 226) The Parliamentary history of an Act does not control its interpretation or determine how far it operates to modify the meaning of terms used in the Act it was passed to amend for the legislature may not have employed apt words to carry its intentions into effect In the decision of this particular case, however, the court, it is contended did not at all adequately consider the bearing of the important changes made in respect to registration by the Act of 1886

It is not, of course, the province of a court to make the law which it administers reasonable logical, and effective for its purpose, but rather to expound it as it stands, and although it may seem absurd to hold that a man who is fully qualified by law to practise as a physician may not tell the public that he is a 'physician,' when the professed object of the principal Medical Act is to inform the public who are and who are not qualified practitioners, yet if it should turn out when Hunter v Clare comes up for review that the case has been rightly decided the remedy must be sought in fresh legislation.

[1] In Mill's Logic the word physician is given as one which had incorporated into its meaning circumstances accidentally connected with it at some particular period. "Physician (φυσικός or naturalist) became in England synonymous with a healer of diseases because until a comparatively late period medical practitioners were the only naturalists."

might be seen at the exhibit of the Excel British and Colonial Milk Sterilising Co, Limited, 28, Victoria-street, S W Here were shown sterilised milk in bottles and tins and sterilised cream. Milk preserved in concentrated form with and without sugar could not be better exemplified than in the preparations of Henri Nestle, of 48, Cannon street, E C These preparations are to be commended, since the greatest care is taken to retain the maximum proportion of milk fat The exhibit included the infant food made by this firm which is prepared in accordance with the requirements indicated We have dealt at some length in our columns with the process of obtaining humanised milk known as Dr Gaertner's The product was shown at the stall of the Friern Manor Dairy Farm, Limited of 20, Farringdon street E C It is cows milk so modified as to present the composition of human milk and every precaution is taken to ensure uniformity, soundness and healthiness of the milk so prepared The Anglo-Swiss Milk Company, o. 10, Mark lane E C, exhibited their well known brand of condensed milk and in addition some useful combinations of cocoa, chocolate, and coffee with milk This brand of condensed milk may be relied upon for a maximum of cream The embodiment of milk proteids is well represented in the white powder known as 'Protene. This substance is in reality dried milk with the fat and sugar eliminated. We have already given in our analytical columns a complete analysis of this product of the Protene Co Limited, 36, Welbeck street, Cavendish square. Protene contains an excessively rich proportion of the essential constituent of all food—namely, proteid We will next pass to meat preparations The invalid food specialities shown by Mr V Benoist of 36, Piccadilly, call for special remark, since in most cases the preparations are preserved in glass and are therefore placed beyond the possibility of metallic contamination whilst being satisfactorily preserved against fermentation or other objectionable changes Clear turtle soup is thus prepared specially clarified so that any irritating or digestible constituents are removed. The exhibit also included consommé de volaille calf's foot jelly, &c The exhibit of the Bovril Company of 30 Farringdon street, E C contained a great variety of specialities including soup powder bovril, meat extract, meat juice, invalid bovril, beef jelly, and stamnoids. As is well known "Bovril" contains not only the stimulating extractives of beef but the nutritious constituents also "Peptarnis" is a powerful nutrient which is prepared by the Liebig Extract of Meat Company of 9 Fenchurch-avenue, E.C It is concentrated pepsine of beef containing everything necessary to sustain life The exhibit of course, included the ordinary extract of beef made on the plan first proposed by the celebrated Liebig An agreeable departure from ordinary beef preparations is 'Hipi a pure mutton essence made by Messrs G Nelson Dale and Co of 14, Dowgate hill E C It yields soup of excellent flavour which is nourishing as well as stimulating The exhibit of Messrs. Brand and Co, Ltd., of Mayfair W, presented a remarkably wide range of invalid foods and delicacies Foremost among these should be mentioned the essences of beef, mutton, veal and chicken, and the concentrated specimens of beef tea, mutton broth, veal broth, and chicken broth. As opposed to animal food preparations may be mentioned the meritorious preparations of Fromm's Extract Co, Limited, of 5 White street Moorfields, E C Preparations are thus made similar in palatability to animal foods and being of a purely vegetable origin it is probable that these foods would be of benefit to persons of gouty tendency For some purposes 'Albene" a highly refined vegetable fat prepared by Messrs Broomfield and Co of 83 Upper Thames-street, E C may be advantageously substituted for butter It is especially suitable for making pastry and does not turn rancid. Messrs. G Van Abbo and Sons of 104 Wigmore-street Cavendish square, exhibited a typical display of their foods prepared especially for diabetics dyspeptics, and invalids while a similar subject was illustrated in the exhibit of Messrs. Callard and Co of 65 Regent street W the latter including food for the diabetic, for reducing weight for the rheumatic and gouty, and for indigestion. Messrs Cox Limited, of Eastcheap-buildings, E C, showed some excellent specimens of 'sparkling gelatin which, as we have shown in our analytical columns is highly refined and pure and is thus adapted as an excellent vehicle for administering wine or beef-tea The statement that Cadbury's cocoa is an absolutely pure article cannot be controverted in view of the results of analysis which in our own hands this excellent article of food has yielded It was the only cocoa shown at the exhibition Hovis bread, which has also been the subject of analysis in our laboratory, was also offered for inspection and trial. As is well known, the basis of the bread as well as the biscuit and flour is ground wheat containing the highly nourishing 'germ' Amongst digestive products none could be more typical or satisfactory than those prepared by Messrs Fairchild Brothers and Foster, of Snow Hill-buildings, E C The exhibit included some excellent preparations of "Pepsin" and "Trypsin," besides peptonising powders and liquids, and a preparation for the extemporisation of humanised milk. Messrs Irving, Son, and Jones of Liverpool and 63, Charing-cross-road exhibited their "Manhu" diabetic foods It is claimed that the carbohydrates are so modified in these preparations as to form a beneficial rather than an injurious aliment to the diabetic As long as carbohydrates are admitted to be present this claim, it seems to us, must be opposed to physiological facts

The exhibit which attracted most attention perhaps in that department of the exhibition which included surgical and hospital appliances was the apparatus illustrating radiant heat treatment by the Dowsing Radiant Heat Company Limited, of 24, Budge-row, Cannon-street, E C The electric heaters are made on the principle of the electric incandescent lamp, so that they are luminous radiators and their heat has been described as 'warm sunshine' They may be adapted to an ordinary fireplace for domestic purposes or applied most conveniently for the local hot-air treatment of rheumatism, gout, and allied painful affections Close by was shown the application of the electric current to the ventilation of buildings by means of the Blackman motor fan of the Blackman Ventilating Co, Ltd, 63, Fore-street, E C Messrs. Watson and Sons of 313, High Holborn, W C, showed a b g x ray tube actuated by a large Wimshurst machine designed by Dr Lewis Jones A powerful induction coil was also shown in working order by Mr H W Cox of 11 and 28, Cursitor street, Chancery-lane. The admirable workmanship of these coils is well known, the winding and insulation of each being personally supervised. Some excellent x ray photographs were on the stall Several applications of the Instra" warmer were shown by Messrs D Blair and Co, of 47, Cannon-street, E C Thus this handy little appliance can be used for the purpose or a pocket, chest or foot warmer and even for bicycle handles and anklet straps The following surgical instrument makers occupied stalls and a good deal of attention seemed to be paid to the new surgical instruments presented for inspection Messrs Mayer and Meltzer, of 71, Great Portland street, W, Messrs John Weiss and Son of 237, Oxford-street, Messrs Evans and Wormull of 31, Stamford street, S.E, Mr W K Stacy 4, Newgate street, E C, Messrs Southall Brothers and Barclay, Ltd, of Birmingham (including their well-known sanitary specialities), Messrs May, Son and Thompson, 7 to 12, Aldersgate street, E C, Messrs Down Brothers of 21, St. Thomas's-street, S.E, the Dental Therapeutic Co of 57 Weymouth-street, Portland-place W (dental instruments and accessories) Besides these there were many exhibitors of anatomical appliances as, for instance, the Domen Belts Co. of 456, Strand W C, who showed their abdominal belts and belt corsets, the Merrilees Corset and Belt Manufacturing Co of 7, Poultry, E C, exhibiting similar appliance, Messrs Anderson, Anderson, and Anderson, Limited, of 37 Queen Victoria street E C, who exhibited their germ proof clothing and water beds, Mr Thomas Holland, of 40 South Audley-street, Grosvenor square W who offered for inspection his improved instep arch sock for flat-foot, the Sanitary Wood Wool Co, of 26, Thavies-inn, Holborn-circus, who showed their absorbent antiseptic dressings, &c., the basis of which is wood wool, the O Connor Extension Co, of 2, Bloomsbury street, who showed their appliance for the lame which compensates for shortening of the leg and enables ordinary shoes to be worn Messrs J F Macfarlan and Co of Edinburgh and 9 and 11, Moor lane E C, who showed their Listerian surgical dressings catgut ligatures, and silk sutures besides the anæsthetics well known in connexion with this firm, and Messrs Wodderspoon and Co of 7 Serle-street Lincoln's Inn, who showed temperature charts

Sanitary preparations and appliances were much in evidence. The exhibit of Messrs. L Blake, Roberts and

Co, of Stratford, was interesting in showing what has been done by the application of sulphur dioxide in small pox epidemics, bubonic plague, and cholera. The gas is supplied liquefied in sealed tins or on a larger scale in copper cylinders Besides sulphurous acid a fluid preparation of phenol was shown, known as "Lozar," wood fibre being used to absorb lozar in affording a disinfectant powder The Amiral Soap Co of 3, Throgmorton avenue, E C, exhibited specimens of their soap We have already dealt with this soap in our analytical columns The exhibit of the Sanitas Co of Three Colts Lane, Bethnal green, E, comprised a very great number of sanitary preparations, the basis of which is the agreeable and efficient "Sanitas" Pasteur filters and the Equifex disinfecting apparatus were illustrated in the exhibit of Messrs J Defries and Sons, Limited, of 147, Hounds ditch Messrs Newton Chambers and Co of Sheffield and 331, Gray's inn road, W C, exhibited numerous preparations of the non poisonous disinfectant "Izal" The Wade Disinfectant Syndicate of 62, Nine elms lane, S W, showed an ingenious automatic disinfector which flushes, deodorises, and disinfects automatically by one and the same operation At the stall of the Berkefeld Filter Co, Limited, of 121, Oxford street, W, the Berkefeld filter was shown in working condition The advantages of this filter are that while it is rapid in action it yields water entirely free from germs—that is sterile The Jeyes Sanitary Compounds Co, Limited, of 64, Cannon street, E C, exhibited their disinfectants of the type which forms a milky fluid with water of which this company were, we believe, the pioneers "Creolin," their specialty, was shown in several forms In addition to the perfectly pure product inseparable from the name of Messrs Price—namely, glycerine—and its combinations with malt and various drugs the Price's Patent Candle Co (York road, Battersea) exhibited several medicated soaps for surgical purposes Besides these there were also sanitary soaps The space on the stall of Fleming's Oil and Chemical Company of 101, Leadenhall street, E C, was occupied chiefly by their moth preventive specialities, besides some disinfectants and tooth powder and sanitary preparations for the bath. "Eucryl" fluid disinfectant is a preparation with which we have already dealt in our analytical columns Together with carbolic acid and phenophorme this preparation was shown by Messrs Major and Co, Limited, of Sculcoates, Hull

The Kronthal Co of 53, Berners street had a very tastefully arranged stall near to the entrance It was the largest display devoted to natural table waters and indeed the largest exhibit in the hall Three kinds of Kronthal water were shown derived from three distinct springs The first is a natural table water (blue label), the second a highly mineralised water said to be useful as a diuretic (red label), and the third contains iron (green label) in a permanent form and in the ferrous condition, so that it is probably of value in anæmia and chlorosis These waters have already been examined in THE LANCET Laboratory, and we were able to report the high condition of purity of Kronthal water and of the presence of mineral constituents which make them wholesome for table and other purposes Purgative mineral waters were exemplified in the exhibit of Messrs Ingram and Royle of 26, Upper Thames street Carlsbad and Hunyadi Janos water serve as types In addition to these the natural mineral waters of Vichy (in bottle) were shown, while Vichy salts and pastilles formed part of the exhibit We have dealt quite recently in our analytical columns with the chemistry of Esvach water which contains the sulphates of sodium and magnesium but which apparently is not a natural mineral water although the active ingredients are in suitable proportion for aperient purposes The specimens were shown by Messrs Davy, Hill, Son, Yates, and Hicks of 64, Park street, Southwark "Sparklets" are now well known By this system the aeration at home of any liquid is an easy possibility We have commended the system especially as it is easily applicable to the extemporary preparation of aerated milk or other liquids for use by invalids This ingenious method of aerating liquids is being developed by Aerators, Ltd, of 89, Broad street-avenue Under this section we may include, lastly, the lime juice cordial known as Stower's and exhibited by Messrs Alexander Riddle and Co of 36 and 38, Commercial street, E As we have shown in our analytical columns this lime juice is a perfectly pure preparation in which the characters of the fresh fruit in regard to aroma and fragrance are retained

A feature of the exhibition was the occurrence here and there of book stalls on which were placed some recent additions to the literature of medicine, and several visitors found pleasure and profit in glancing through the books thus offered for inspection Amongst those thus exhibiting were the following —Rebman, Limited, of 129, Shaftesbury-avenue, Cambridge circus, W C (these publishers announce specially that arrangements have been completed for the publication in English of "Lehmann's Medicinische Handatlanten"), Messrs John Bale, Sons, and Danielsson, Limited, 83-89, Great Tichfield street, Oxford street, W, and The Scientific Press, Limited, of 28 and 29, Southampton street, Strand

BACTERIOLOGY IN TRINIDAD

WE have received a copy of the Trinidad *Mirror* which contains an account of Professor Crookshank's visit to the Colonial Hospital of Trinidad and the remarks made by him on that occasion After saying that nothing had given him greater pleasure during his visit to the West Indies than an inspection of the Colonial Hospital, Professor Crookshank praised its administration and made several important criticisms and suggestions We will quote these remarks *verbatim*

There is evidence on all sides of capable administration and of a thoroughly efficient and zealous medical and surgical staff. Every attention is given as far as possible to carrying out Listerian principles. The ventilation of the wards is admirable and the attention to general sanitation is satisfactory Nevertheless there is room for improvement. I would draw attention to the proximity of the ward for special obstetrical operations to the room used for the sanitary service of the general wards I would also urge the need for more complete classification of the patients and that admission should not be given to cases of leprosy and to other cases (which need not be specifically mentioned here) which are quite unsuitable for admission to the wards of a general hospital. Lastly I would point out the splendid opportunities which exist for the investigation of the cause and prevention of tropical diseases, a matter which is receiving at home the attention of the Colonial Secretary of State and of the general public. Such work is of the greatest possible importance to our colonies and indirectly to the mother country Great efforts are being made in England to train medical men (for service in the colonies) in the modern treatment and prevention of tropical diseases. In England there are opportunities for studying imported cases of tropical diseases and a training can be given in bacteriological methods. Where, however as in Trinidad, there is a large colonial hospital that is obviously the best place in which the investigation of tropical diseases can be carried on The appointment of a medical officer who has devoted his time, and is prepared to continue to give up his time, to preventive medicine and bacteriological research in Trinidad, is a question which it is hoped will receive the immediate attention of the Colonial Government and the unanimous support of an enlightened and progressive public.

The suggestions made with a view of promoting bacteriological research and better sanitation in Port of Spain were also brought to the notice of his Excellency the Governor of Trinidad in a memorandum on the subject submitted by Professor Crookshank Referring to the material for investigation at the Colonial Hospital, Professor Crookshank pointed out how much still remained to be done in investigating the nature of malaria, and that in the case of yaws and many other tropical diseases there was an open field for research. Professor Crookshank then put the case very strongly in support of his suggestion for the appointment of a medical officer of health and the equipment of a small laboratory "The general practitioner in the colony, if he is to keep up with modern practice, must be able to have doubtful cases of diphtheria, malaria, typhoid fever, &c, bacteriologically examined, and he must be able to apply the antitoxin treatment The veterinary surgeon is fighting without the modern weapons of defence if he is unable to examine milk for tubercle bacilli, or to test horses for glanders by the use of mallein, or to test cows for tuberculosis by means of tuberculin The absence of any facilities for scientific research at the hospital, the demands of the general medical practitioners and of the veterinary surgeons in the colony, point to the need for a bacteriological laboratory either at the hospital or as an extension of the existing government laboratory The question of the appointment of a colonial bacteriologist is one to which I would earnestly draw the attention of your Excellency I hope that before long the colonial government may see its way to combining the work of a medical officer of health for Port of Spain with the duties of colonial bacteriologist" After appealing for

sweeping reforms in the sanitation of Port of Spain, Professor Crookshank expressed the opinion that they could be effected by the appointment of an officer holding "the degree and diploma of M D and D P H Such a specially trained officer should be responsible, if I might venture to say so, directly to your Excellency He must have responsibility and he must have control"

In the best interests of Trinidad we trust that we may hear that the suggestions have been carried out both as regards improving the sanitation of Port of Spain and promoting the study of tropical diseases

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

In 33 of the largest English towns 6700 births and 3842 deaths were registered during the week ending Saturday, May 20th The annual rate of mortality in these towns, which had been 16 5 and 17 7 per 1000 in the two preceding weeks, declined again last week to 17 6 In London the rate was 16 3 per 1000, while it averaged 18 4 in the 32 provincial towns The lowest rates in these towns were 9 8 in Croydon, 13 6 in Huddersfield, 13 8 in Bristol, and 13 9 in Portsmouth, the highest rates were 21 7 in Wolverhampton 23 8 in Plymouth, 23 9 in Norwich and in Liverpool, and 24 6 in Manchester The 3842 deaths included 354 which were referred to the principal zymotic diseases, against 339 and 365 in the two preceding weeks, of these, 109 resulted from measles, 95 from whooping-cough, 69 from diphtheria, 31 from diarrhœa, 29 from scarlet fever, 20 from "fever," (principally enteric) and one from small pox. No death from any of these diseases was recorded last week in Croydon, Wolverhampton, or Halifax, in the other towns they caused the lowest death rates in Preston, Bristol, and Birkenhead, and the highest rates in Salford, Blackburn, Burnley, Leicester, and Swansea The greatest mortality from measles occurred in Nottingham and Manchester, from scarlet fever in Norwich and Burnley, and from whooping cough in Plymouth, Cardiff, Blackburn, Burnley, Huddersfield, and Gateshead. The mortality from "fever" showed no marked excess in any of the large towns The 39 deaths from diphtheria included 24 in London, nine in Leicester, seven in Sheffield, six in Swansea, five in Salford, and three in Leeds One fatal case of small pox was registered in Hull, but not one in London or in any other of the 33 large towns, and one small pox patient was under treatment last week in the Metropolitan Asylums Hospitals The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2161, against 2131, 2139, and 2210 on the three preceding Saturdays, 211 new cases were admitted during the week, against 226, 219, and 259 in the three preceding weeks The deaths referred to diseases of the respiratory organs in London, which had been 251 and 257 in the two preceding weeks, were again 257 last week and were 41 below the corrected average. The causes of 46, or 1 2 per cent, of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in Bristol, Nottingham, Leeds, Newcastle-upon-Tyne, and in 12 other smaller towns The largest proportions of uncertified deaths were registered in Liverpool, Preston, Halifax, and Gateshead

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns, which had been 18 5 per 1000 in each of the two preceding weeks, rose to 19 0 during the week ending May 20th and was 1 4 per 1000 above the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 10 2 in Greenock and 12 8 in Paisley to 20 5 in Glasgow and 22 2 in Leith The 581 deaths in these towns included 21 which were referred to measles, 12 to whooping cough, nine to diarrhœa, eight to scarlet fever, five to diphtheria, and five to "fever" In all, 60 deaths resulted from these principal zymotic diseases against 52 and 53 in the two preceding weeks These 60 deaths were equal to an annual rate of 2 0 per 1000, which was 0 4 above the mean rate last week from the same diseases in the 33 large English towns The fatal cases of measles, which had been 16 and 27 in the two preceding weeks, declined again to 21 last week, of which 17 occurred in Glasgow, two in Edinburgh, and two in Aberdeen The 12 deaths referred to whooping-cough slightly exceeded the number recorded in the preceding week, and included six in Leith and three in Edinburgh The fatal cases of scarlet fever, which had been three in each of the two preceding weeks, rose to eight last week, of which five occurred in Glasgow The five deaths from diphtheria were within one of the number recorded in the preceding week, and included two in Glasgow and two in Dundee The five deaths referred to different forms of "fever" showed a further increase upon recent weekly numbers and included two in Edinburgh The deaths from diseases of the respiratory organs in these towns, which had been 109 and 97 in the two preceding weeks, rose again to 103 last week, but were 16 below the number in the corresponding period of last year The causes of 19, or more than 3 per cent, of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN

The death-rate in Dublin which had been 24 8 and 26 7 in the two preceding weeks further rose again to 26 8 during the week ending May 20th During the past four weeks the rate of mortality in the city has averaged 27 0 per 1000, the rate during the same period being 16 4 in London and 17 8 in Edinburgh. The 180 deaths registered in Dublin during the week under notice showed a slight increase upon the number in the preceding week, and included seven which were referred to the principal zymotic diseases, against seven and eight in the two preceding weeks, of these three resulted from whooping cough, two from measles, one from scarlet fever, one from diphtheria, but not one from small pox, "fever," or diarrhœa These seven deaths were equal to an annual rate of 1 0 per 1000, the zymotic death rate during the same period being 1 6 both in London and in Edinburgh. The fatal cases of whooping-cough, which had declined from eight to two in the three preceding weeks, rose again to three last week. The two deaths referred to measles were the first recorded in the city since the beginning of April last The mortality from scarlet fever showed a decline from that recorded in the preceding week The 180 deaths in Dublin last week included 23 of infants under one year of age and 45 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons showed a decline from the numbers recorded in the preceding week Four inquest cases and five deaths from violence were registered, and 76, or more than a third, of the deaths occurred in public institutions The causes of 11, or more than 6 per cent, of the deaths in the city last week were not certified

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

The following appointments are announced —Staff Surgeons J L Thomas to the *Endymion* and R Hardie to the *Astræa* Surgeons E D Macnamara to the *Endymion*, G Taylor to the *Astræa* W J Bearblock to the *Cambridge*, G E Duncan to the *Renown*, and G G Borrett to the *Pembroke*

The under mentioned gentlemen, who competed on May 8th and following days at the Examination Hall, Victoria Embankment for appointment as surgeons in the Royal Navy, have been granted commissions and are appointed to the *Duke of Wellington*, additional for Haslar Hospital —

Name.	Marks.	Name.	Marks.
H. M. Hart-Smith B.A., M.B	2538	N J Roche	1959
S H Woods B.A. M.B.	2451	T Marles-Thomas	1953
P T. Sutcliffe M.A. M.B.	2411	A W Nourse	1901
J P H. Greenhalgh, M.B.	2203	J H. Jones	1878
L A. Bales.	2179	A. H. Prichard	1856
O R. Nicholson	2172	H. L. Geoghegan, B.A., M.D	1804
J T M. McDougall	2096	A J Laurie	1804
R. T Burton	2066	S. J Haylock	1687
R. Hughes	1942	J E. Powell	1665
G M. O Richards	1868	J Y Robertson, M.B	1643
		J H. Lightfoot	1632
		P G Williams	1612

INDIA AND THE INDIAN MEDICAL SERVICES

Surgeon General Harvey, Director General, Indian Medical Service, takes three months leave in the middle of May Surgeon General Spencer, Principal Medical Officer, Punjab,

officiates Whilst on leave Surgeon General Harvey will take the opportunity of visiting the Pasteur Institute at Paris and also Amsterdam in connexion with sewage questions The retirement of the following officers has been sanctioned Lieutenant Colonels D Martin, I M S, and C Mallins, I M S, 1st Hyderabad Lancers, Major Young, I M S, Civil Surgeon, Umballa, and Lieutenant Greig, I M S, 27th Madras Infantry The services of Captain Waters, I M S, are lent to Bengal, and those of Captain Lane, I M S, to the Punjab, for employment in the Jail Department Captain Statham, R A M C, is detailed for plague duty The services of Lieutenant-Colonel J S Wilkins, D S O, I M S, are replaced at the disposal of the Government of India from May 1st, 1899, on relinquishing charge of the duties of Special Medical Officer for Plague Operations, Bombay Major Thorold, I M S, has taken over charge of the office of Sanitary Commissioner in the North-West Provinces and Oudh from Colonel Thomson, I M S

Army Medical Reserve of Officers

Surgeon Lieutenant-Colonel C A Patten, having resigned his appointment in the Volunteers, ceases to belong to the Army Medical Reserve of Officers

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Royal Engineers (Volunteers) 1st Hampshire Surgeon Lieutenant J Kyffin to be Surgeon Captain 2nd Lancashire (the St Helens) Surgeon Lieutenant-Colonel E F Hall resigns his commission, also is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement *Rifle* 2nd Volunteer Battalion the Royal Fusiliers (City of London Regiment) Reginald Courtenay Gayer to be Surgeon Lieutenant 1st (Pembrokeshire) Volunteer Battalion the Welsh Regiment Surgeon Lieutenant J M Phillips resigns his commission, also is permitted to retain his rank and to continue to wear the uniform of the battalion on his retirement 3rd (The Blythswood) Volunteer Battalion the Highland Light Infantry Surgeon Lieutenant J A Wilson to be Surgeon Captain

Volunteer Infantry Brigade

South Wales Surgeon Lieutenant-Colonel P E Hill, 1st Volunteer Battalion the South Wales Borderers, to be Brigade Surgeon-Lieutenant-Colonel, on appointment as Senior Medical Officer to the brigade

The Royal Military Tournament

If any plea were necessary for the continuance of the annual display at the Agricultural Hall, Islington, the fact that the funds of the military charities are each year greatly augmented through its aid would amply suffice But there are other and even better reasons which justify the holding of the Tournament Not the least of these is the stimulus which it gives to recruiting, and so convinced are the authorities of this that should the present show prove successful—of which we presume there can be no doubt—it is proposed to repeat the same exhibition at Manchester almost directly Another way in which the Tournament does an immense amount of good is by educating the public in things which pertain to military life and warfare

On Wednesday, May 24th, the eve of the actual opening to the public, a full dress rehearsal and private view were given before the Press, the committee and members of the Tournament, and others The first item on the programme, the naval display by seamen from H M S *Excellent*, was highly appreciated by all who witnessed it and illustrated the ability and smartness of those who belong to our first line of defence The musical ride by the G Battery of the Royal Horse Artillery was something more than a spectacular display and showed to great advantage the cleverness of the Royal Artillery drivers, while the cavalry display by the 6th Dragoon Guards (Carabiniers) and New South Wales Lancers was excellent Both these exhibitions have a distinct educative value It often happens that our army when engaged abroad is severely criticised by the public at home because of the ill results following upon what appears to have been some act of indiscretion If those who judge so severely knew their subject it would often be obvious to them that what they term an act of indiscretion was not only excusable but absolutely inevitable by reason of the difficulties under which real war is conducted And this is a point which a visit to the Tournament will make clear to the arm-chair critic The cavalry display as presented at the Tournament brings this out very unmistakeably and teaches a lesson that all should know who desire to sit in judgment upon our troops or their leaders

The *pièce de résistance* of the show is, of course, the pageant which this year is entitled "Warriors of Britain" and is typical of the gradual evolution of the British army from the time of the Wars of the Roses to the present day Under the direction of Mr, Clarkson, the well known costumier and perruquier, the details of the dresses have been made accurate in even the smallest details and the spectacle is quite equal to any of previous years The gymnastic display by non commissioned officers under instruction at Aldershot, though not so showy as other items on the programme, shows well the excellence of the physical training which our soldiers undergo The musical double ride is pretty and effective and the combined display—the storming of Passer Sala—brings the performance to a close.

The sanitary arrangements of the hall are much the same as they were last year and indeed under the direction of the various officers who have been in medical charge of the Tournament little further can be done in a hall which is not peculiarly adapted for military displays Major H E R James, R A M C, is the Principal Medical Officer this year and he is assisted by Surgeon Major W R Crooke Lawless of the Coldstream Guards Veterinary-Major R Rowe, A V D, is the Principal Veterinary Officer

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As our readers are already aware enteric fever was very prevalent and fatal in the garrison of Quetta last year It appears that, owing to changes in the head quarter staff at Bombay, some delay has arisen in giving effect to the sanitary recommendations submitted by a committee appointed to inquire into and to report upon the subject According to the *Times of India* of May 6th Major General Sir William Galbraith has proceeded to Simla for the purpose of urging on the Commander in Chief the necessity of the measures proposed for minimising the risk of enteric fever in the Quetta garrison Between August and December, 1898 the deaths from enteric fever in that garrison aggregated 75 rank and file, one officer, and about a dozen women and children, and unless the main recommendations of the scheme submitted are immediately taken in hand the enteric fever season will soon occur again, the prospect of which is something too alarming to calmly contemplate

The Punjab

Anti plague inoculations have become very popular in the Jullundur district where over 4000 people in the infected area have submitted themselves to the process The inhabitants of all the villages, such as Malpur, Garcha, and Buhara, have been inoculated

We hear that Professor A E Wright of the Army Medical School, Netley, has at length succeeded in convincing the War Office authorities of the advisability of allowing inoculation against enteric fever to be introduced into the army We hear that all soldiers are to be offered this benefit at no distant date We believe that the outbreak of typhoid fever in South Africa and the immunity enjoyed by the men of the Royal Army Medical Corps who were inoculated before going to Egypt have been potent factors in bringing about this desirable ruling

Mr Norman Hay Forbes, F R C S Edin, has been appointed a Member of the Royal Company of Archers, Her Majesty's Body Guard for Scotland

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Presentations to Medical Men — On May 14th, at the Queen's Walk School, Nottingham, on the occasion of the presentation of certificates to the successful members of the Midland Railway Ambulance Corps, Mr J F Blurton, M B Durh, was the recipient of a small dressing-case as a token of the esteem in which he is held by the members of the corps —On the conclusion last week at Leatherhead of the course of 12 lectures on first aid to the injured in connexion with the St John Ambulance Association, and a series of six lectures on nursing open to women, the honorary secretary, Mrs Davis, on behalf of those attending, presented Mr James Dunbar Brunton, M.B Edin., with a silver inkstand, appropriately inscribed, as a mark of appreciation of his gratuitous services

Correspondence.

"Audi alteram partem."

MEMORIAL STATUE TO SIR THOMAS BROWNE, M D

To the Editors of THE LANCET

SIRS —The committee begs permission to appeal through your columns for the support of the medical profession to the above memorial Sir Thomas Browne in his day occupied the highest position in his profession and is confessedly one of the greatest and most eminent of our English writers and philosophers Yet he stands almost alone amongst these as having no permanent public memorial The movement to erect a statue of him in Norwich where he resided for 46 years and where he is buried, has received most influential support both medical and general, and it now includes that of the Royal College of Physicians of London and of its President The sum of about £400 has so far been subscribed and further contributions are now solicited towards the estimated £1000 or £1200 required Donations to the fund will be gladly received by either of the honorary secretaries, Dr Bensly or Mr Charles Williams of Norwich, or by the acting secretary Mr F R. Eaton, King street, Norwich

I am, Sirs, yours faithfully,

PETER EADE
Chairman of Committee.

May 15th 1899.

PERSONATION BY "QUALIFIED" ASSISTANTS.

To the Editors of THE LANCET

SIRS —Will you allow me space to caution medical practitioners against employing alleged qualified assistants until these seeking employment can produce certificates of registration from the General Medical Council and diplomas There are cases of undoubted personation in existence now—unqualified men taking and using the names of duly qualified practitioners without, I need hardly say, the knowledge and consent of the latter I have just come across such a case, the third within a short space of time and I trust that steps may be taken to prosecute the offender

I am, Sirs, yours faithfully,

A G BATEMAN
General Secretary of the Medical Defence Union.

4 Trafalgar-square W C

THE OPEN-AIR TREATMENT OF PHTHISIS IN VICTORIA.

To the Editors of THE LANCET

SIRS,—In an abstract from Dr McAdam's presidential address at the annual meeting of the Victorian Branch of the British Medical Association which appeared in THE LANCET of Feb 11th is the following sentence "That while the Victorian climate was second to none in the facilities it afforded for taking advantage of the full benefit of the open air treatment, yet there was in the colony no institution in which any attempt was made to carry it out in its completeness'" Now so far from this being the case we have in Victoria two buildings known conjointly as the Victorian Sanatorium for Consumptives—one on the dry plains for winter and a mountain retreat for the hot months. Altogether there are 54 beds which are under one management and are generally full It is difficult to know what Dr McAdam means by the open-air treatment "in its completeness," for even in Germany, the cradle of the system, the treatment varies in different sanatoria. Our institution is carried on medically and financially much on the same lines as Ruppertshain in Germany and Heiligenschwendi in Switzerland, which were recently visited by myself In another part of the colony there is in connexion with the Austin Hospital for Incurables accommodation for 30 incurable cases This institution works in a friendly way with the Victorian Sanatorium and patients are frequently interchanged Considering that the population of our colony is only a little over a million I think that as far as accommodation for consumptives is concerned we compare favourably with other places. I may say that I am rather surprised that a gentleman of Dr McAdam's standing should make such a statement without duly acquainting himself with the facts

I am, Sirs, yours faithfully,

DUNCAN TURNER, M R C P Lond,
Honorary Medical Examiner Victorian Sanatorium

April 6th, 1899.

"FEES TO MEDICAL WITNESSES AT ASSIZES AND SESSIONS"

To the Editors of THE LANCET

SIRS,—Let me thank you for once more bringing this matter to the front I wonder how many medical men will have the courage to act upon the suggestion which you throw out in the last paragraph of the leading article under the above heading in THE LANCET of May 6th I do not object to the medical men here refusing to make the sacrifices entailed by accepting police and assize court work They do it though with the knowledge that the police surgeon is not quite so free as themselves to refuse all the filthy cases. The matter of the rape which you allude to seems like one that happened here a month ago when for more than two hours the police vainly tried to induce a medical man to examine an unfortunate child, 10 years old, who was said to have been criminally assaulted It seems that it will take a few scandalous cases of that kind to bring the Home Secretary to understand that we are in earnest I would suggest that all medical men should communicate with their respective Members of Parliament with a view to bringing some pressure to bear upon the Home Office I am, Sirs, yours faithfully

J CHRONNELL.

Hindley May 15th, 1899.

COINCIDENCES IN MEDICAL PRACTICE

To the Editors of THE LANCET

SIRS —In THE LANCET of May 13th you comment on this point under the heading 'Coincidences in Hospital Practice,' the annotation being suggested by articles on two rare forms of hernia and two cases of filariasis which had come under observation at the London Hospital within a very short space of time As you remark, cases such as these are by no means uncommon in hospital practice but they are far less frequently seen in private practice, and it is this fact of coincidence" alone and not the nature of the injury sustained which induces me to place on record the following singular experience.

About noon on Sunday, April 30th 1899, a man from Tillingham (a village 16 miles away), aged 68 years, was admitted to the Maldon Workhouse Infirmary under the care of my partner Mr Thomas Tomlinson, the medical officer, suffering from an injury to the left shoulder He stated that he was at Bradwell, a village near Tillingham, on the previous Thursday evening April 27th, and whilst holding a horse harnessed to a trap the animal reared, lifting him suddenly from the ground by the left arm A medical man found that the patient had sustained a dislocation of the humerus, but he could not reduce it at the time or at a second attempt made on April 29th The patient was therefore sent to the workhouse infirmary We found the injury to be of the subglenoid variety, and under anæsthetics reduction was effected The patient returned to his home on the same afternoon

On the following day at 1 P M a native of Bradwell, aged 19 years was admitted to the workhouse infirmary suffering from an injury to the left shoulder received at the same time as the injury to the previous patient had been received The history he gave was that when the former patient fell to the ground he had gone to his assistance and was knocked down by the horse, his left arm being trampled upon We diagnosed a sub-glenoid dislocation and under slight anæsthesia this was quickly reduced although owing to the patient being rather muscular more force was required than in the first case. He left the workhouse almost immediately That as the result of what may be called one accident two persons only should suffer and each receive exactly the same injury—viz, a dislocation on the same side and of the same variety—and that injury alone, must I think be a unique occurrence The accuracy of the patients' statements was vouched for by the gentleman who brought them both to the workhouse.

I am, Sirs, yours faithfully,

HENRY J PRICE, F R C S Eng

Maldon, Essex, May 23rd, 1899.

officiates Whilst on leave Surgeon General Harvey will take the opportunity of visiting the Pasteur Institute at Paris and also Amsterdam in connexion with sewage questions The retirement of the following officers has been sanctioned Lieutenant Colonels D Martin, I M S, and C Mallins, I M S, 1st Hyderabad Lancers; Major Young, I M S, Civil Surgeon, Umballa, and Lieutenant Greig, I M S, 27th Madras Infantry The services of Captain Waters, I M S, are lent to Bengal, and those of Captain Lane, I M S, to the Punjab, for employment in the Jail Department Captain Statham, R A M C, is detailed for plague duty The services of Lieutenant-Colonel J S Wilkins, D S O, I M S, are replaced at the disposal of the Government of India from May 1st, 1899, on relinquishing charge of the duties of Special Medical Officer for Plague Operations, Bombay Major Thorold I M S, has taken over charge of the office of Sanitary Commissioner in the North West Provinces and Oudh from Colonel Thomson, I M S

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the intestine The stone may either traverse the whole intestinal tract or may remain for a long time at one place. Colic or even volvulus may be the consequence and when the peristaltic action is not strong enough to urge the stone forwards ulceration and some degree of peritonitis may ensue It is essential that the diagnosis should be made as early as possible and the stone removed by operation Ileus caused by gall stones must be treated like other forms of ileus, the condition of the intestines and the general state must be duly considered and in every case of colic the gall bladder ought to be examined

Obstruction of the Intestine by a Piece of Gauze

Professor REHN also described a case in which after a woman had been operated on for pyosalpinx a fæcal fistula was formed and when it healed the patient felt quite well Four months after the operation she suffered from colic and a tumour could be felt on the right side of the abdomen Symptoms of ileus suddenly occurred and the abdomen having been opened 40 centimetres (16 inches) of necrosed intestine were removed, the region of the first operation being quite normal A large piece of gauze was found in the removed portion of intestine Owing to the impossibility of its having penetrated from the abdomen through the intestinal walls Professor Rehn was of opinion that the patient, a hysterical woman, had swallowed the gauze —Dr KADER (Breslau) said that he had observed a similar case where colic was complained of 10 days after an operation for pyosalpinx and the wound spontaneously opened After some time a piece of gauze was passed by the anus and the patient ultimately succumbed to ileus and peritonitis The necropsy showed extensive intestinal lesions which rendered it probable that the gauze had made its way from the abdomen into the intestine Dr Kader then made experiments on animals and ascertained that a silk thread tied round the intestine after some time cut through the intestinal wall and it was found in the interior of the intestine

Coxa Vara

Dr SUDEK (Hamburg) read a paper on the Anatomical Conditions of Curvatures in the neighbourhood of the Hip-joint, and drew attention to a spine on the top of the curvature This spine, though not described in anatomical works, may also be found in normal femora; it originates from the osseous tissue between the trochanter and the head of the femur and in Dr Sudek's opinion belongs to the epiphysis Dr Sudek agreed with Dr Sprengel that coxa vara was often of traumatic origin and was especially liable to be produced by the weight thrown on the femora of young persons whose bones were not rigid.—Dr SPRENGEL (Brunswick) showed a case of Traumatic Coxa Vara operated on by him He said that the traumatic origin of the disease might be inferred (1) when the pain is severe, (2) when the disease has suddenly developed, (3) when it is unilateral only, and (4) when no other deformities are present He warned his hearers against confounding coxa vara with subcapsular fracture of the femur—Dr HOFMEISTER (Tübingen) said that the differential diagnosis between traumatic and non-traumatic coxa vara might be very difficult, especially when no clinical history was obtainable Cases with contractures were always traumatic —Professor KOCHER (Berne) was of opinion that genuine coxa vara was caused only by overweighting the femur As regards treatment, he preferred resection to osteotomy

Carcinoma of the Penis

Dr KÜTTNER (Tübingen) described a case of carcinoma of the penis where the lymphatic glands of the abdomen were affected by metastases earlier than the inguinal glands He has studied the anatomy of the lymphatic vessels of the penis and has discovered that they are in connexion partly with the inguinal and partly with the abdominal glands In cases of carcinoma the glands of both regions ought therefore to be removed

Buttons for Intestinal Surgery

Dr SULTAU (Göttingen) drew attention to some disadvantages of Murphy's button, especially its weight which might produce necrosis and perforation of the intestine. The construction of a button capable of being completely disintegrated was difficult and in Dr Sultau's opinion it was sufficient to have a button which is partially disintegrable, leaving an insoluble portion small enough for easy expulsion The button used by him consisted of two parts of decalcified ivory connected together by a metallic ring, and between them a piece of caoutchouc was interposed in order to make gentle pressure on the intestine The buttons were covered with caoutchouc so as to avoid too rapid disintegration The metallic ring was easily expelled

Transplantation of Cartilage

Dr VON MANEGOLD (Dresden) showed patients in whom he had, after resection of the larynx, performed transplantation of pieces of cartilage from the ribs The patients had suffered either from strictures of the larynx caused by syphilitic and tuberculous ulceration or from malignant growths They could now be understood when they spoke; the results of the treatment must therefore be regarded as encouraging

Suture of Wounds of the Heart

Professor WEHR (Lemberg) described Experiments on Suturing the Heart Muscle in Animals After partial resection of several ribs and opening the pericardium the heart was incised and the wound sutured The hæmorrhage was stopped by digital compression —Professor REHN (Frankfort) said that at the meeting of the Congress in 1897 he reported a case of Wound of the Heart in which he had operated [1] The patient still remains quite well

Papers were also read by Professor HOFFA and Professor LORENZ on Congenital Dislocation of the Hip-joint, by Professor TILMANN on Fractures of the Skull, by Dr BENDA, Dr KÜTTNER, and Dr VON BÜNGNER on Tuberculous Osteitis, by Dr HERCZEL and Dr VON BECK on Gastro-enterostomy, by Professor KRAUSE on Resection of the Occipital Nerves, and by Dr JORDAN on Perinephritis Professor VON BERGMANN was elected president of the next Congress

THE INTERNATIONAL MEDICAL CONGRESS, PARIS, AUGUST, 1900

(FROM OUR SPECIAL COMMISSIONER)

THE French committee entrusted with the organisation of the next International Medical Congress have already completed all the preparatory work which can possibly be done at this early stage This, the greatest of all the congresses, will meet, as already announced, in 1900 from August 2nd to August 9th It was in January, 1898, that the members of the organising committee held their first sittings and they soon found that they had before them a most formidable task to accomplish First it was necessary to decide into how many sections the Congress should be divided Acting on the experience acquired during the Universal Exhibition of 1889 a strong feeling was manifested that there had been too many congresses on the preceding occasion This time the tendency is towards concentration and we shall therefore witness an amalgamation of congresses Three or four congresses have decided to unite their forces with the general Medical Congress Thus, instead of having a separate International Congress on Forensic Medicine, another on Diseases of the Urinary Organs, and a third on Dermatology the members of these three congresses will join the International Medical Congress and content themselves with forming sections of this one great congress Probably the International Congress on Therapeutics will also follow the same course On the other hand, much greater liberty or autonomy has been given to the sections Indeed, it amounts to this, that each section will constitute, comparatively speaking, a small congress of its own, federated for common purposes with many other congresses meeting at the same time In one respect this greatly simplifies matters the one circular serves for all the congresses or, rather, sections as they must now be called On the other hand, the International Medical Congress already very unwieldy in consequence of the large number of its members, will have an even greater number of adherents than in former congresses At the last congress, which was held at Moscow, there were about 7000 members inscribed and not far short of 5000 were actually present But it is far easier to go to Paris than to Moscow, and therefore it is anticipated that a much greater number of members will attend the congress at Paris How are all these many guests to be received? There must be at least one general meeting of the congress and where can

[1] THE LANCET, May 8th, 1897 p. 1306.

"GONORRHŒAL SALPINGITIS"

To the Editors of THE LANCET

SIRS,—In THE LANCET of May 20th I am reported (p 1367) as having said during the discussion on Gonorrhœal Salpingitis at the British Gynæcological Society on May 11th that in cases of salpingitis the tubes were "sterile in 60 per cent of cases, the gonococcus was found in 20 per cent, and other micro-organisms in the remaining 20 per cent In the last group the infection had no doubt been primarily gonorrhœal and there was a secondary infection by the bacillus coli or the tubercle bacillus" I cannot accept responsibility for this statement as to the tubercle bacillus What I did say was that probably *some* of the cases included in the last group were primarily due to a gonorrhœal infection but that there had occurred a secondary infection by some other micro-organism, notably by bacillus coli communis I did not say anything as to tubes primarily infected by the gonococcus being specially liable to subsequently become infected by the tubercle bacillus

I am, Sirs, yours faithfully,

May 20th, 1899. ALEXANDER G R FOULERTON

"A CRITICISM OF THE MORE COMMONLY EMPLOYED TESTS FOR ALBUMIN IN URINE"

To the Editors of THE LANCET

SIRS,—In leaving this subject pending further investigations I would like to point out definitely how the matter stands In my paper I looked at the matter from the clinical point of view and did not push the tests to a chemical conclusion I have repeated my experiments twice since and it may be taken as certain that, judging from egg albumen in aqueous solution and pushing the tests to a chemical conclusion, (1) taking the excretion of urine at 50 ounces per diem the heat test will not detect a loss of albumin (dried at 100° C) of less than from three to three and a half grains per diem, (2) under the same conditions the nitric acid test will detect a loss of a quarter of a grain per diem, and (3) a solution of carbolic acid in absolute alcohol is almost as delicate as the nitric acid test

The heat test was applied in the usual way—namely, by heating the upper part of the tube to ebullition and after observation heating again after the addition of a drop of acetic acid Picric acid is much more delicate as a chemical test than I made it in my paper, but the fineness of the cloud, its colour, and the fact that at an early stage of dilution it is clear to transmitted light make its clinical value stop probably at a loss of about two grains of albumin per diem The investigations will be continued with serum albumin and in mixtures Dr Brodie, my fellow assistant to the Professor of Physiology in Glasgow University, has undertaken an independent investigation We use different balances, pipettes, and weights and compare results of series of experiments, so that it is not likely that any error in observation will escape detection

I am, Sirs, yours faithfully,

Glasgow, May 22nd, 1899. WALTER COLQUHOUN

THE TREATMENT OF TETANUS

To the Editors of THE LANCET

SIRS,—I have read with considerable interest the cases of tetanus recently recorded in THE LANCET It occurs to me that a great opportunity has been lost of harmonising practice with theory No cultivation appears to have been made in any of the cases recorded If the drum stick bacillus of Nicolaier be the actual cause of the disease in question and, being an anaerobic organism, of necessity confined to the tissues in the immediate vicinity of the wound and from thence distributing toxin to the general system, surely the indication would be freely to excise the part, and if necessary to amputate, in either case taking special care not to inoculate the new wound. I must frankly confess to a feeling of disappointment at this not having been done, as two of the cases ended fatally

I am, Sirs, yours faithfully,

STEPHEN TOWNESEND, F R C S Eng

Inner Temple, May 23rd, 1899

PAROTITIS AND INFLUENZA

To the Editors of THE LANCET

SIRS,—In an annotation in THE LANCET of May 20th entitled "The Bacillus of Influenza," mention is made of the occurrence of parotitic symptoms in conjunction with the presence of the Canon Pfeiffer bacillus in the bronchial mucus This is the first time I have seen in print a suggestion that parotitis may be a complication of influenza and it will accord with the view I took of a case which came under my notice early in the year In the early part of February I was in attendance for well marked influenza on two children in a young ladies' school The head mistress of the school, who, by the way, is a rheumatic subject, nursed them, and in a short while fell sick herself in the same way On Feb 11th she was convalescent and two days later, after being downstairs, she had a rise of temperature and pain in the parotid regions—in short, went through a mild attack of what appeared to be mumps Arising in a school I was eager to trace the source of infection, although I was doubtful whether the complaint was true mumps All I could ascertain was that a small child had had influenza and had thereafter a similar attack to that from which my patient was suffering, that it was considered an influenzal manifestation, and that she was allowed to mix with others—indeed, she attended at the school some three weeks or more prior to my patient contracting the parotid symptoms I may say that no other cases of mumps arose in the school, although if the little girl was the source of infection she would be far more likely to infect some other child than to infect the headmistress, of whom she saw very little I should add that my patient although in middle life had never had mumps, though of course I isolated her so far as was possible I thought at the time that the complaint must be an influenzal parotitis and not true mumps, but I have not seen any other such cases and have not heard of any other than the little girl mentioned above I could not get precise dates as to when this child came into the school It would be interesting to know if many of your readers have met with such a complication or sequela of influenza I should not have thought of mentioning the matter in print myself but for your annotation I crave your indulgence to allow me to remain anonymous on this occasion and will subscribe myself, Yours faithfully,

London, May 23rd, 1899 M D CANTAB.

THE GERMAN SURGICAL CONGRESS

(FROM OUR BERLIN CORRESPONDENT)

(Concluded from p 1190)

Phosphorus Necrosis

DR VON STUBENRAUCH (Munich) said that in experiments made for the purpose of elucidating the action of phosphorus on the bones he trephined the mandibles in dogs and guinea pigs and injected phosphorus through the alveolus, but necrosis did not ensue. He then exposed the animals to vapours saturated with phosphorus and obtained the same negative result In order to imitate as much as possible the conditions which the workpeople encounter in match factories the animals were sent to a match factory to be left for a certain time in the drying room which is the most unhealthy department. Although the periosteum had been previously removed from the mandibles no necrosis took place Dr von Stubenrauch therefore concluded that the typical necrosis of workers in match factories is not caused by the vapours alone but that a specific predisposition must also exist.

Ileus caused by Gall stones

Professor REHN (Frankfort) reported the case of a man operated on for strangulated umbilical hernia The intestine being gangrenous it was resected and a large gall stone was found in it The patient recovered. Professor Rehn said that gall stones may produce the symptoms of ileus either by mechanical occlusion or by causing inflammation of the intestines A reflex occlusion, as suggested by Professor Koerte, may sometimes occur, sometimes the stone by conveying virulent germs may irritate the mucous membrane of

manner in which plague officials are treated As far as the English medical men and nurses are concerned there seems to be an official passive opposition against them. There is an entire want of liberality of treatment and unnecessary difficulties are continually being placed in their way

The claims of Lustig s new curative serum apparently want pushing if one may judge from a report recently prepared by Dr Galliotti and forwarded to the Municipal Commissioner of Bombay If the cases are allowed to speak for themselves they pronounce it a failure. As a matter of fact, the published figures are wholly misleading because the cases were practically selected ones At the Arthur road Fever Hospital and at the Mahratta Hospital from Jan. 29th to the end of February 68 patients were treated, of whom 48 died and 20 recovered, giving a mortality rate for even these selected cases of 70 6 per cent. The whole hospital mortality for the month of February was 79 41 per cent. The unscientific basis of such returns makes the whole experiments and the report absolutely valueless, and when it is remembered how many cases are brought to the hospitals to die within a few hours which, of course, are not subjected to the curative serum treatment but go to swell the mortality returns of the hospitals it will even be thought that the curative serum treatment must have raised the mortality rather than reduced it In another report submitted by Dr Choksy of the Municipal Fever Hospital a further series of cases is referred to which were treated during the month of March. 74 patients were treated, of whom 49 died and 25 recovered, giving a mortality rate of 66 21 per cent., against 79 48 per cent in cases not treated with the serum. It must here again be noted that all cases which were moribund and all those which had gone over six or seven days and were either semi-convalescent or convalescent were excluded The cases which prove fatal within 24 hours after admission to hospital amount to over 30 per cent. and a certain proportion of cases die after seven days of illness and during convalescence To say that the cases selected represent a fairly average type of acute cases is absurd. Then again it is asserted that the serum treatment has been put to as severe a test as possible during the height of the epidemic. To pick cases is neither a severe test nor a scientific method and to excuse the failure of the serum by stating that the epidemic has been known for its extreme virulence is discounted by the fact that the mortality of plague cases in the same hospital at the same time last year was within a fraction of what is recorded this year I regret to be obliged to state that there is no satisfactory evidence to show that Lustig's serum can reduce the mortality rate in the slightest degree

May 4th.

LIVERPOOL

(FROM OUR OWN CORRESPONDENT.)

Malaria and Mosquitoes Address by Major Ross, I.M S, at University College

MAJOR ROSS, I.M S, the recently appointed lecturer in the School of Tropical Diseases, delivered an interesting illustrated lecture on the Relations of the Malarial Parasite to the Mosquito in the physiological theatre of University College. The lecturer said that malaria was not so dramatic a disease as cholera, it did not kill so quickly, but it killed far more people In India it killed about 5 000 000 people a year It was also a politically important disease because it checked the progress of civilisation in districts the richest in the world killing more of our army than were killed by the enemy Malaria had been found to be due to a parasite in the blood Of this he was absolutely certain, having studied the subject for 10 years in the tropics. The lecturer explained how a parasite gradually developed, destroying a corpuscle of the blood and leaving it a mere shell, when fully developed it scattered and, attacking other corpuscles, destroyed and poisoned them likewise. Even if not so numerous as to cause fever they bred in comparatively small numbers, they caused an indifferent condition of health. The treatment was quinine but this did not help them very much What they required to know was how malarial fever was produced. To do so they must find the parasite in external nature and the problem had been solved by Dr Patrick Manson. Besides these forms of malarial parasites which had been described other forms were found Describing how in watching a drop of blood drawn from a malarial patient there was seen in 11 minutes the remarkable effect of snake-like forms wriggling away and disappearing, Dr Manson came to the conclusion that the life-history of the malarial parasite when it left the human being was carried on in the mosquito, and therefore that malarial fever was propagated by the mosquito The lecturer described how in the tropics he followed out Dr Manson s theory beyond the point where he left it The mosquito, which was not an ephemeral insect but one which would live for months under favourable conditions, he found to be furnished in certain species with an internal process which developed the parasite and its poison and lodged it into a poison gland opening into the creature's proboscis The mosquito, in puncturing the skin, was thus the means of inoculating a human being with the malarial poison It was hoped that this species of malarial mosquito might be exterminated in certain districts and this he mentioned would be the subject of a future lecture

Hospital Extension at Widnes and Wallasey

The foundation stone of a new wing to the infectious diseases hospital at Widnes was laid by the chairman of the Widnes Health Committee on May 16th For some time past the hospital had proved inadequate for the requirements of the borough and it was felt by the medical officer of health that in the event of the outbreak of an epidemic it would be impossible to cope with such a contingency The new wing of the hospital will contain the house surgeon s matron's, and nurses' rooms, a surgery, and store-rooms. The enteric fever wards will provide 10 beds for male and 10 beds for female patients There will also be two wards in the observation block. The joint Health and Works Committee of the Wallasey council have decided to extend their infectious hospital at Mill lane at a cost of £9000

Appointment of Bacteriologist to the Liverpool Workhouse

The select vestry, upon the recommendation of the medical officers of the Liverpool Workhouse, have decided to appoint a bacteriologist to the workhouse hospital. Hitherto the medical officers had endeavoured to utilise this science through the favour of the professor of pathology at University College who had gratuitously examined many specimens for them. The Mill road Infirmary of the West Derby Union possesses a well equipped laboratory and it was felt by Dr Alexander and Dr Robertson that the workhouse hospital was being left behind other Liverpool hospitals They did not ask for laboratories or expensive apparatus in view of the close proximity of the Thompson-Yates laboratories It was unanimously agreed to appoint Professor Boyce as bacteriologist to the workhouse hospital at an annual salary

Drunkenness in Liverpool

Dr Hope in his annual report for 1898 commenting on the deaths in Liverpool due to excessive drinking says that there appears to be no reason to doubt that the total amount of drunkenness in the city is diminishing and there is evidently a gain to propriety in the decrease in the amount of drunkenness in the open streets There is, however, room for doubt whether there is any diminution in the gross abuse of alcohol within doors in the more squalid parts of the city 10 years ago—namely, in 1889—police cases of drunkenness numbered 16,000, by rapid annual decreases the number last year had diminished to 4000 But if the deaths from excessive drinking in the two years be compared there is found to have been only a slight diminution in the deaths amongst males from that cause, while the deaths of females from a similar cause have actually increased. Deaths from excessive drinking are localised and it is in the district where they are most numerous that the general death rate is highest and the proportion of deaths in workhouses is greatest. Inquests were held during the year on the bodies of 204 persons—viz., 43 males and 42 females whose deaths were due to excessive drinking, 56 males and 33 females whose deaths were accelerated by excessive drinking, and 13 males and 17 females who were fatally injured by accident or suicide whilst under the influence of drink There were two deaths from violence caused by persons under the influence of drink, the persons who were killed being also intoxicated at the time Dr Hope deplores the vice of intemperance as a cause of poverty, disease and death and its paralysing influence on the efforts of the sanitary authorities in the direction of improving the condition of the masses

May 23rd.

such a meeting be held? There is but one hall in Paris which will hold about 10,000 persons and that is the great hall of the Trocadero But in discussing this matter with me the general secretary of the congress, Dr Chauffard, displayed a strong prejudice against this hall—he urged that the acoustics were bad and, above all, that the hall was ugly It was only necessary to look round the apartment which Dr Chauffard inhabits to realise that he has a very keen and artistic appreciation of the beautiful He was eloquent in expressing the desire that the congress should meet in some place where the decorations would be artistic and suitable to the occasion Undoubtedly the new hall of the Sorbonne is admirably adapted for the purpose only it is not half big enough, but he could not bring himself to forgive the Trocadéro its inartistic appearance - I suggested a theatre, but even the Grand Opera can comfortably seat only 3000 persons What will be done to meet this difficulty has not yet been decided.

There are to be 23 sections in all, and so far as the sectional meetings are concerned they can be easily housed and this in an appropriate manner Thus the Section of Dermatology will meet at the St. Louis Hospital for Venereal Diseases, where a magnificent museum will be at the disposal of the members The Section on Urinary Diseases will meet at the Necker Hospital, where that class of complaint is treated The Collège de France, the Sorbonne, and the Faculty of Medicine will be at the disposal of the other sections To obtain reporters for all these sections has been a colossal undertaking Contrary to the policy followed by the organisers of the International Congress of Hygiene, the organising committee of the International Medical Congress have addressed themselves more particularly to foreigners Thus, for instance, when it is judged necessary to appoint three reporters on any given subject there will be only one French reporter, the two others will belong to some other nationality The French organisers felt that as a matter of courtesy, they should give to their guests the largest share in the proceedings But for this purpose it has been necessary to undertake an amount of correspondence which can scarcely be appreciated except by those who have had some experience in this sort of work As a result of this vast correspondence some 250 medical men, of whom only a third are Frenchmen, have undertaken to act as reporters on the various subjects which are to be submitted to the 23 sections Some sections will have reports on six different questions, some on only three, but four questions per section is the more general rule All these reports will be written in French, English, or German, but those who report in either of the two last mentioned languages are requested to add a short summary of their reports in French, if they cannot do this themselves then the organising committee will endeavour to have these summaries translated into French for them The reports will be published in full and will constitute as it were the official subjects of discussion

Apart, however, from these reports, individual members of the congress are at liberty to send any communications they choose which are suited to the section of the congress which they propose to attend These communications or papers can be read in the sections, but the committee do not undertake to publish more than a summary of them, unless they prove to be of exceptional importance A circular giving full details of all the reports expected, the names of the reporters, of the presidents, of the secretaries and of the committee men of the 23 sections, the rules of the congress, the form which has to be filled up by intending members, and other information is now in the hands of the Government printers This circular will be issued in French, English, and German, and will be despatched to all countries during the course of this summer For the present the organising committee have nothing more to do They must now wait for the replies which this circular will elicit In the meanwhile the organising committee are anxious to express their high appreciation of the friendly support which they have received from members of the profession in all countries The letters which they have sent abroad have met with a prompt response and this has greatly facilitated the work of organisation

The organising committee are now desirous to impress on intending foreign visitors the absolute necessity of forming national committees or in some other way of taking measures to ensure that there shall be the necessary accommodation for them when they reach Paris The United States of America is as yet the only nation which has provided for this The American Government has a representative in Paris who is organising for the reception of all American exhibitors and of all Americans who mean to attend any of the congresses This agent will secure rooms for them in advance The British members of the congress would save a great deal of trouble and expense if they constituted a British committee, created a common fund, and despatched a commissioner to Paris This representative by contracting for several hundred rooms in the different hotels could obtain them at a cheaper rate Wholesale transactions are always less expensive A member of the congress arriving in Paris alone would be charged some exorbitant price for his room and might even fail altogether to obtain a room The overcrowding in consequence of the Universal Exhibition and of the International Medical Congress threatens to be unprecedented The organising committee cannot undertake to find lodgings for the thousands of visitors expected, they will have work enough to do in attending to the business of the congress itself The general secretary was therefore very anxious that I should endeavour to impress upon the British members that it was absolutely necessary that they should institute some sort of organisation of their own with representatives in Paris to secure the necessary accommodation This must be done a long time beforehand Every member of the congress must make up his mind when he is coming to Paris, how long he desires to remain there and what sort and number of rooms he will require, and these he must secure before leaving England, otherwise he will run a great risk of being stranded in the streets of Paris and will become the helpless victim of every form of extortion All this should be seen to and in good time Meanwhile all correspondence relating to the International Medical Congress should be addressed to the general secretary, Dr Chauffard, 21, Rue St Guillaume, Paris

Paris, May 15th.

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

The Plague in India —Complaint from the English Medical Men and Nurses —Further Experiments with Curative Serum

PLAGUE returns for India for the week ending April 30th show a further great reduction, the deaths having fallen to 1184 in the Bombay Presidency, of which Bombay city reports 360 and Karachi city 207 The Madras Presidency is almost free In the Mysore State, Mysore city, and the Kolar goldfields the cases are also fewer In the Bengal Presidency there were 141 deaths reported, of which Calcutta furnished 125 The Punjab returned 25 The Central Provinces, the Hyderabad State, Rajputana, and Assam are practically free The rapid fall in Bombay city exactly corresponds with the experience of previous outbreaks and amounts to a diminution of nearly 200 deaths for every week since the climax towards the end of March. In Calcutta the outbreak still keeps subdued and shows no sign of increased virulency The cases are now fairly well scattered over all parts of the city In Karachi the disease has shown a decided change for the better and the third outbreak is now probably on the decline

Many complaints are being made by the medical men and nurses who have come out from England for plague duty and little inducement appears to be offered to them to remain I understand that in consequence of so many having resigned fresh help again is being sought for It would surely have been better to keep if possible those who have partially learnt the language and know something of the habits and customs of the natives Petty annoyances in the way of official difficulties in getting pay, inadequate lodging accommodation for the sisters, unreasonable opposition to a few days' casual leave after continuous service over a considerable period, prolonged delay in replying to official communications involving anxiety and expense to the applicants, bad management with regard to duties, and insufficient subordinate native assistance are some of the additional grounds which have recently given rise to so much dissatisfaction I understand that volunteers for plague duty were recently called for from all parts of India and that only three medical officers were willing to come forward This, considering that the service men get extra pay, shows the unsatisfactory

L.R.C.P Lond Torquay, James Wilson M'Brearty L.R C S Edin, New Zealand, Wyndham Austruthers Milligan, M B, C M Aberd, Edinburgh; Henry John Forbes Simson, M B, C.M Edin., Edinburgh and Charles Benjamin Rossiter, L R.C.P & S Edin, Amlwch, Anglesey

Edinburgh Royal Infirmary

At the weekly meeting of the Managers of the Edinburgh Royal Infirmary, held on May 22nd, it was agreed to open Blair House the nurses' rest at Colinton, on June 1st, but it was stated that the opening would be quite informal

Montrose Asylum

The new house for private patients in connexion with Montrose Asylum was opened on May 22nd Carnegie House, as it is designated, was commenced four years ago and consists of three blocks The central block is occupied by a large hall on the ground floor and a dining hall and the administrative department on the first floor The east block is intended to accommodate male patients and the west block is for female patients The estimated cost was £16,500 but about £30 000 have been expended on the building It will accommodate 80 patients The building is heated by the Sturtevant system with fires in winter time, and the drainage and sanitary arrangements are excellent The architect was Mr W Kelly of Aberdeen

May 22nd.

IRELAND

(FROM OUR OWN CORRESPONDENTS)

Irish Medical Association

THE Council of the Irish Medical Association met in the Royal College of Surgeons in Ireland on May 17th to consider the report to be submitted to the annual meeting arranged to be held on June 20th not in Dublin as heretofore but in the Examination Hall, Queen's College, Cork The President and Council of the Queen's College will give an entertainment to their visitors and the annual dinner will be held at the Royal Victoria Hotel The members of the medical profession in Cork will also entertain the members of the Association by an excursion to view the harbour and to witness the regatta at Queenstown

Memorial to the late Dr Haughton

The Rev Dr Haughton though a highly qualified member of the medical profession never engaged in medical practice, yet was widely known among physicians as well as among the general scientific public On the occasion of the opening of the memorial building recently erected in the Zoological Gardens, Dublin, which took place on May 19th addresses were delivered by His Excellency the Lord Lieutenant Field Marshal Lord Roberts, V C, K.P, Sir Robert Ball, and others The ceremonial was attended by a very large and representative audience

Limavady Board of Guardians

A curious point came before the Limavady Board of Guardians at their weekly meeting on May 22nd, when Dr Watson, the medical officer of the workhouse, reported that by the instructions of the Local Government Board for Ireland a number of old, weak, and debilitated people had been getting extras such as eggs milk, or tea although not under any treatment or in the hospital. He believed that he had no power to order anything for them unless they were in the hospital He wished the guardians to ask the Local Government Board if these extras were to be discontinued or if they were to be continued, who was to order them. He had ordered none for the next week until he received instructions. The board of guardians ordered the extras, but Dr Watson's point is an important one Can extras be ordered without those receiving them being in hospital? The Local Government Board auditor will probably when he examines the accounts settle the matter The Local Government Board wrote in reference to the scale of fees to be charged by the dispensary medical officers to persons of limited means that under Article 7 of the dispensary rules the scale of fees was intended when furnished to guide the guardians and wardens in issuing tickets and enabling them to determine whether medical relief should be given under the Medical Charities Act or whether the applicant, having regard to the doctor's charges, could not afford to pay for medicine and advice It appeared to the Local Government Board that the scale submitted should state specifically whether the medical officers charges were 7s 6d or 5s a case and that the words "according to the circumstances of the patients" should be omitted It was decided to send a copy of this letter to each of the dispensary doctors

Newry Urban Council

Mr W H Smartt, medical officer of health, having reported the occurrence of cases of fever in the urban district the Secretary to the Local Government Board for Ireland has requested a reply as to what steps have been taken to remedy the sanitary defects mentioned by Mr Smartt in his report It seems that nine cases of fever have been reported It was decided that if the plans to remedy the buildings where the epidemic occurred were not approved of the guardians would prosecute

Belfast Royal Hospital

At a meeting of the staff of the Belfast Royal Hospital held on May 23rd Dr J A. Lindsay was elected secretary in place of Professor Whitla resigned. Mr West was awarded the Coulter exhibition Professor Byers, in the name, and at the request, of the staff expressed to the chairman, Professor Cuming, the very great pleasure with which they all welcomed him back again after his enforced absence and hoped that he might long be spared to act as their permanent chairman They regarded him not merely as head of the profession, but personally they were nearly all his old pupils and his constant attitude towards them had been that of 'guide philosopher and friend' In reply Professor Cuming thanked his colleagues very warmly for the kind expression of their feelings towards him

Successes of Queen's College (Cork) Students at the Royal University Examinations

At the recent examinations for the degrees of M.B, B Ch, B A.O, held by the Royal University, out of about 40 candidates who presented themselves only 17 were successful The total "mortality" was therefore well over 50 per cent Nine of the candidates were educated in Cork and seven out of the nine were successful. Three of the seven obtained "upper pass"

Queen's College (Cork) Athletic Sports

The Queen's College (Cork) Athletic Club held their annual meeting on May 13th The contests were good and though the weather was very unfavourable there was a large gathering to witness the events A cycle polo match, the first played in the South of Ireland, excited considerable attention The club dinner was held in the evening, amongst the guests being Professor Hartog, Professor Charles, Professor Corby and Professor Bergin In the absence of the president of the club Professor Corby presided One of the students proposed the toast of "The Professors of the College." Professor Charles replied in a felicitous speech and referred to the mutual advantages of the professors and students meeting socially. Several songs were contributed by the students and a very enjoyable evening was spent

May 22nd.

PARIS

(FROM OUR OWN CORRESPONDENT)

Iodine in Sea Water

AT the sitting of the Academy of Sciences held on May 1st M. Armand Gautier said that the general opinion was that iodine existed in sea water in the form of alkaline iodides or earthy salts On the contrary, he had found that sea water taken some distance out and either from the surface or at no very great depth contained no inorganic iodides. The whole amount of iodine, with the exception of a very insignificant trace, existed as bodies of organic composition A portion of this organic compound is fixed in organic bodies such as zoöglœa, algæ, sponges which live on the surface or a little below it and make up the "plankton of the high seas Four fifths of the iodine of the sea is composed of soluble organic bodies they are nitrogenised and rich in manganese and phosphorus They accumulate along the shore under the forms of masses of foam containing zoöglœa and diatomaceæ They are charged with iodine and being also partly

MANCHESTER

(FROM OUR OWN CORRESPONDENT.)

Manchester Parks and Playgrounds

IF Manchester is named, the mental eye of the untravelled Southerner sees a dirty, smoke enveloped wilderness of cotton mills and mean streets inhabited by a semi barbarous race of sickly and stunted factory hands It is not quite so bad as that, but even to day the conditions are not favourable for the physical development of the city operative and Manchester has but slowly learned the importance of providing open spaces for recreation and health The total area within the city boundaries is at present 370 acres, divided into 23 open spaces, the largest, Boggart Clough, containing 76 acres, the rest varying in size down to one acre in extent. The euphonious name Boggart Clough, or Boggart's Hole Clough, was given presumably from its having the reputation of being haunted, "boggart" being the vernacular for ghost or spectre In addition to these there are various small open spaces valuable as playgrounds for the children and portions of the larger ones also are set apart for the same purpose The suburb of Crumpsall is one of the last to be provided with a park, which is to be opened shortly by the Lord Mayor It occupies 12 acres and when completed will have cost about £21,000 A more recent and comparatively less costly acquisition is at Newton Heath, where the Brookdale estate of 45 acres, together with a mansion, has been bought by the corporation for £26,500 Nothing need be said as to the importance and value of these open spaces to the working classes, but the idea that it was the duty and interest of the corporation as guardians of the public health to provide them instead of leaving it to private benevolence is, unhappily, of recent date Had it been otherwise large open spaces and parks might have been secured at far less cost than is now required and the amœba like growth of whole districts of brick would not have been allowed without a much more generous distribution of air spaces than we find at present It is a matter of keen regret to many that owing to the dilatory and haggling tactics of the corporation Trafford Park with its 1100 or 1200 acres was lost to Manchester and snapped up by a syndicate

The Salford Sanatorium

The Salford Corporation find it necessary to extend the Ladywell Sanatorium and wish to borrow £19,550 for the purpose During the inquiry by the Local Government Board on May 12th Mr Mullen, the medical superintendent, said that there was a general want of accommodation and had been, especially as to cases of scarlet fever and enteric fever, during the last three years At present they could take 96 scarlet fever and 48 enteric fever cases, and the proposed addition was for 48 beds for the former and 32 for the enteric cases, with 12 beds for the nursing staff Salford was increasing immensely and, as the chairman of the Health Committee said, "the Ship Canal has done a good deal towards that." He also said that 73 per cent of the notified cases came into the hospital and that there was no difficulty in getting cases to come in Mr Tattersall, the medical officer of health, confirmed Mr Mullen's statement as to the desirability of extension He was asked by the inspector if there was any smell from the Ship Canal and said "There is still a little in summer, but it is getting less year by year," owing to the efforts of the Mersey and Irwell Joint Committee We must be thankful for this if it is really so and not due to the deadening of the olfactory sensibility of Salford

Accommodation for Lunatics in the Chorlton Union

At the meeting of the Chorlton Guardians on May 12th the chairman drew attention to the want of accommodation for lunatics which he described as disgraceful Instead of sending them to the workhouse at Withington "they ought to be in an asylum" For the past two years there had been the greatest difficulty in getting lunatics, especially males, into the county asylums With females the difficulty had been less, but it was said that "the Lancaster Asylum was now full up" Dr Rhodes said that the Asylums Board were doing their best to meet the demand for accommodation He hoped that in about twelve months a part of the Winwick Asylum would be opened They were also putting up buildings at the asylums near Preston and at Prestwich and Lancaster It would seem on the face of it as if the authorities could not provide rapidly enough for the increase of lunacy

Appointing Two House Surgeons for the Union Workhouse.

At the same meeting the Chorlton Guardians appointed a senior and a junior house surgeon for the workhouse One of the lady guardians said that there were nine applicants, six of whom were women, but two of the men were chosen and recommended for the appointment. She wished to know if the women were left out because they were women "They stood as a pioneer board and if the women had been dropped out on account of their sex she did not think that they could claim to hold that position any longer" She was informed that the sub-committee had brought before the board the two candidates whom they thought most eligible Dr R Kelsall and Mr W H Richardson were appointed By and by sex will probably tell against a man's appointment.

May 24th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS.)

The Requirements of the University of Edinburgh

THE Court of the University of Edinburgh had recently before them a report from the committee appointed to draw up a statement and appeal for funds for University purposes, in which it was stated that the funds required for the equipment of the Public Health Laboratory and for the preparation of a library catalogue had been provided, the former by the generosity of Mr John Usher of Norton and the latter from the munificent bequests of the late Sir William Fraser For the library, however, funds are still urgently required The most pressing wants are (1) a fire-proof room for the storage of rare books of the fifteenth and early sixteenth centuries and the MSS, which number about 7000, (2) a fund, amounting at the lowest figure to £25,000, for the purchase of scientific and literary journals and of larger works of reference, and (3) extensive structural changes and new bookcases, costing at least £5000, or, what would be much more desirable, a new and suitable building for the library Another direction in which it would soon be necessary to spend money was the establishment of the Physical Laboratory The construction and equipment of this laboratory would be a large undertaking, but it was one which would have soon to be faced if the scientific reputation of the University were to be maintained

Chair of Physiology in Edinburgh University

The complete list of candidates for the vacant chair of physiology in the University of Edinburgh is as follows Dr Wace Carlier, Lecturer on Experimental Physiology and Histology and senior assistant to the late professor of physiology, University of Edinburgh, Dr Noel Paton, superintendent of the Research Laboratory of the Royal College of Physicians of Edinburgh, Lecturer on Physiology in the School of Medicine of the Royal Colleges, Edinburgh, &c, Professor Reid, Professor of Physiology in University College, Dundee, St Andrews University, Professor Schäfer, Jodrell Professor of Physiology in University College, London, Professor G N Stewart, Professor of Physiology and Histology in the Medical School of the Western Reserve University, Cleveland, Ohio, Professor Stirling, Brackenbury Professor of Physiology and Histology, Owens College, Manchester, and Professor Anderson Stuart, Professor of Physiology in the University of Sydney

Tuberculosis Congress in Berlin

Professor Sir Thomas Grainger Stewart goes to Berlin to attend the Congress on the Prevention of Tuberculosis as an honorary member and as the delegate of the Senatus Academicus of the University of Edinburgh Bailie Pollard goes to represent the city of Edinburgh

Royal College of Surgeons of Edinburgh

The following gentlemen, after having passed the requisite examination, were on May 16th elected ordinary Fellows of the Royal College of Surgeons of Edinburgh John Basil Hall, M B, B C Cantab, M R C S Eng, L R C P Lond, Bradford; Charles William Donald, M B, C M Edin, Edinburgh, Edward William Scott Carmichael, M B, C M Edin, Edinburgh, Robert Black Purves, M B, C M Edin, Edinburgh, John Harley Gough, M R C S Eng.

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"Phospho-carnic Acid in the Muscles of the Fasting Subject"

The Reale Accademia di Medicina of Turin, mainly through Professor Mosso, has signalised itself by its contribution to the "physiology and pathology of nutrition" Your readers will be interested in the latest and not the least striking accession to these—a memoir on the above mentioned theme by Professor Mosso's *protégé*, Dr G Jarozzi It will be found in the "Atti" of the Accademia.

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NEW YORK.

(FROM OUR OWN CORRESPONDENT)

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THE work of the Bureau of Animal Industry of the Department of Agriculture in suppressing and preventing diseases of animals has grown to be of great importance The bureau now inspects all importations of stock animals and annually refuses to accept many diseased animals shipped from Europe The chief of the bureau has recommended that horses should be included in the list, there being no reason why they should be exempt as they are able to carry contagious diseases as well as other stock The bureau's work in demonstrating the efficacy of a serum cure for hog cholera has attracted much attention in various parts of the country and has developed some scepticism The operations of the bureau have now been carried on for two full seasons and the results are conclusive The next step is to convince the Legislature in some of the hog raising States of the advisability of taking up the treatment for the farmers of their respective States and of having arrangements made to supply the serum to those who wish to try it In such cases the Department of Agriculture stands ready to lend its aid and to contribute its knowledge and experience in the preparation and administration of the serum The serum used is a combined serum intended to prevent or cure either hog cholera or swine plague It is prepared by gradually inoculating a horse or other subject with the blood of a cholera-diseased hog until it becomes immune, when its blood is drawn off, the clot is extracted, and the remaining serum is used in hypodermic injections against these two diseases It is injected into the blood of the diseased hog and usually cures it The percentage of cures during the last two years of experiment has been about 85, whereas in untreated herds attacked by the diseases the percentage of deaths is usually about 85 Another good work of the bureau is the treating of black leg among cattle This disease affects the young stock in herds, killing from 10 to 20 per cent where it obtains a foothold The bureau's treatment for this disease is inoculation and losses are diminished to 1 per cent The terrible disease of cattle called pleuro pneumonia which threatened the entire cattle industry of the United States and subjected all imported cattle to suspicion has been entirely eradicated by the bureau's efforts In 1887 the bureau began work on this disease and found a chaotic state of affairs in cattle-raising by reason of it Since 1892 not a single case of pleuro-pneumonia of cattle has been discovered in the United States A problem now interesting the bureau is the Texas fever of cattle When it began work in connexion with this disease almost nothing was known concerning its origin It has been discovered to consist in a micro-organism which feeds upon the red corpuscles of the blood and which is carried from one animal to another by the southern cattle tick. If these ticks can be eradicated the disease is not transmitted. Dips have therefore been used to kill the ticks and quarantine regulations have been established by the bureau, so that Texas fever can now be said to be under control. No animal disease causes greater loss annually than sheep-scab For years the greatest mystery enveloped this trouble It was not known whether it resulted from blood disorders or from outside influences, but the Bureau of Animal Industry comes out with a clear statement that investigation shows that the disease is simply caused by a parasite which eats into the flesh of the sheep, that it can be easily killed by a home-made "dip," and that it is so easy of eradication that there is really little excuse for its being found in any flock.

The Health of Havana

Among the most gratifying of the official reports which reach the Government are those from the United States health officers in Cuba which vindicate the belief so frequently and emphatically expressed by Americans in former years that Cuba would be a veritable garden spot of the tropics and a salubrious abode if Spanish rule were ended The vile conditions of the cities of the island, breeding diseases of the malignant type, are now, however, being rapidly supplanted by cleanliness and the improvement from a sanitary view is remarkable as well as pleasing The deaths from all causes continue to decrease every week and the present mortality is the lowest recorded for many years

American Merchant Seamen

The new Act relating to American merchant seamen is a comprehensive measure of 26 sections and is the result of four years of hearings and investigations It establishes a scale of provisions for American merchant seamen much higher than that of any other nation and provides ampler forecastle accommodations and prompter payment of wages If any person knowingly sends or attempts to send or is a party to sending or attempting to send an American ship to sea in the foreign or coastwise trade in such an unworthy state that the life of any person is likely to be thereby endangered he shall in respect of each offence be guilty of a misdemeanour and shall be punished by a fine not to exceed $1000, or by imprisonment not to exceed five years, or both, at the discretion of the court Flogging and all other forms of corporal punishment are prohibited on board any vessel, and no form of corporal punishment on board any vessel shall be deemed justifiable, and any master or other officer thereof who shall violate these provisions or either of them shall be deemed guilty of a misdemeanour, punishable by imprisonment for a term of not less than three months and not more than two years The amount of allotments of wages is materially reduced and seamen are not permitted to sign away their wages in advance in this country except by express approval of a shipping commissioner or foreign consul if the vessel is foreign Imprisonment for desertion in American ports is abolished and it is not allowed in foreign ports not far distant in the case of crews of American vessels More liberal provision is made for the relief of distressed American seamen abroad

Trained Nurses Celebrate

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Further details are to hand concerning the recent suicide of Dr Laforest who was accused of certain offences at a home for destitute children Hearing that he was to be prosecuted he went to Paris on a Sunday to give himself up, but finding the Palais de Justice shut he returned home and dreading the scandal which would attach to his name even if he were acquitted he determined to commit suicide. After talking the matter over with his wife he bade farewell to her and his two children He then went into his consulting room, stopped up all the windows and the door, turned on the gas, and lay down on the sofa. While awaiting death he continued to converse with his wife who in her turn, from the other side of the door, besought him not to lose courage When she could no longer hear him speaking and concluded by a dull thud that she heard that he had rolled off the sofa on to the floor she went to fetch the police When they arrived two hours later and forced the door they found nothing but a corpse The wife has been arrested as an accessory to his murder

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The governing body of the Assistance Publique has again been discussing this delicate question It had already decided that there were two classes of patients in easy circumstances who might be admitted into the hospitals—namely, strangers and foreigners passing through Paris who could not be treated in a hotel and patients afflicted with infectious diseases The council has now added a third class—that is to say, those inhabiting a commune who have to undergo a severe operation but cannot be operated on in their own homes or in a *maison de santé* Such patients will have to pay a much higher fee than merely the net cost of their maintenance Unfortunately, the council laid down no regulations as to honoraria to the surgeons who will thus have to operate gratuitously on rich patients filling their beds who are known to be able to pay The council considered a demand made by the mutual aid societies that their members should have a certain number of hospital beds reserved for them, and this, too, gratuitously, without the society having to pay anything for maintenance The council, however, refused to grant this demand on the ground that it would be an undue favouring of members of friendly societies and would press very hardly on the really poor

New Professors

The chair of Historical Medicine at the Faculty of Medicine at Paris which has been vacant for six months has just been filled by an election which took place on May 18th There were three candidates, all neurologists and former pupils of Charcot—M Brissaut, M Pierre Marie, and M Gilbert Ballet M Brissaut was unanimously elected The new professor is well known as one of the most gifted and brilliant writers of the medical faculty Although he has not directly interested himself in the history of medicine he has written a little book upon popular terms for illnesses and matters having to do with medicine and their origin which is a veritable *chef d'œuvre* The Municipal Council has not yet given its decision as to who is to occupy the new chairs of Gynæcology and Pædiatrics which have just been founded To the names of those actually in the field—namely, Dr Richelot, Dr Pozzi, and Dr Hartmann—must be added that of Dr Doyen

May 23rd

ROME

(FROM OUR OWN CORRESPONDENT)

Centenary of Volta's Invention of the Pile

THAT "the future belongs to electricity" was largely in evidence on May 20th, when His Majesty King Humbert opened the "Electric World's Show" at Como in honour of the invention of the pile by Alessandro Volta in the May of 1799 No effort has been wanting on the part of the great industrial centres of the Alta Italia or on that of the King's Government to heighten its attractions and to ensure its success, and when I mention its 11 galleries covering an area of 20 000 square metres and accommodating the specimen work of 1000 exhibitors, many of them foreign and nearly all of them of world wide fame, I may absolve myself, as the Scottish law phrase runs from "condescending on particulars" In these columns[1] I drew attention to the medical interest of the exhibition—an interest dating from Galvani, Volta's great predecessor, and carried on through special therapeutic developments by Nobili, and still further and more widely by Matteucci, till "electricity in its application to the healing art" may as truly be called an "Italian contribution," as chemistry has been claimed by Professor Wurz as a "French science" There are other attractions to Como at this season especially, but these fall into the second line in presence of this wondrous display of human contrivance and energy, bequeathed by the century now nearing its end to its imminent successor and heir

Protection of Women and Children in Factories and Mines

The deteriorating physique of the Italian labouring poor is traced to many causes—not least to the employment of women and children in works or industries unsuited to their age or sex Not an hour too soon a Bill has been introduced into Parliament for the prevention of this abuse It is now before me and a selection from its main provisions will indicate its salutary tenour —1 No woman and no child under 15 years of age shall be employed in factories served by more than 10 hands or provided with a "motor" or in excavations or in mines without authorisation of the Prefect acting on medical advice as to the health and capacity of the said woman or child 2. By Royal Decree, inspired by the Consiglio Superiore di Sanità and by the Consiglio dell' Industria will be determined the dangerous and unhealthy works forbidden to children of both sexes under 15 years of age or to women in their minority, and there will also be determined those works in which they may be employed under specified conditions of age, including observance of a special time table of daily work and of technico-hygienic precautions also specified 3 Children under 10 years of age shall be absolutely excluded from serving in industrial establishments, those under 14 years of age shall equally be excluded from work underground in excavations and mines and those under 12 years of age from work above ground 4 Women in their minority shall be excluded from underground service 5 Night-work carried on in industrial establishments, in excavations, and in mines is forbidden to children of both sexes who have not completed their fifteenth year and to women in their minority who when the Bill shall have become law are not found already employed 6 Children of both sexes

[1] THE LANCET, Feb 25th 1899 p. 534, 'The Mechanism of Electrotherapeutics.'

between 10 and 12 years of age shall not be kept at work for more than six hours out of the 24 and children from 12 to 15 years of age and women in their minority for not more than 12 hours out of the 24 Such work must be interrupted by one hour's relaxation when it lasts less than eight hours and by two hours relaxation when it lasts longer 7 To children up to 15 years of age and to women in their minority must be allowed 24 hours' consecutive relaxation per week and women in the puerperal state cannot be employed at an earlier period than at least 14 days after parturition We have lately had a reconstruction of the Cabinet which almost amounts to a change of Ministry. Fortunately the above salutary Bill will not be wrecked by that "solution of continuity" (as the older surgeons expressed it), but like the great measure of University Reform carried through its second reading by the Minister of Public Instruction may be expected to become law before the session is much older

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The governing body of the Assistance Publique has again been discussing this delicate question It had already decided that there were two classes of patients in easy circumstances who might be admitted into the hospitals—namely, strangers and foreigners passing through Paris who could not be treated in a hotel and patients afflicted with infectious diseases The council has now added a third class—that is to say, those inhabiting a commune who have to undergo a severe operation but cannot be operated on in their own homes or in a *maison de santé* Such patients will have to pay a much higher fee than merely the net cost of their maintenance Unfortunately, the council laid down no regulations as to honoraria to the surgeons who will thus have to operate gratuitously on rich patients filling their beds who are known to be able to pay The council considered a demand made by the mutual aid societies that their members should have a certain number of hospital beds reserved for them, and this, too, gratuitously, without the society having to pay anything for maintenance The council, however, refused to grant this demand on the ground that it would be an undue favouring of members of friendly societies and would press very hardly on the really poor

New Professors

The chair of Historical Medicine at the Faculty of Medicine at Paris which has been vacant for six months has just been filled by an election which took place on May 18th There were three candidates, all neurologists and former pupils of Charcot—M Brissaut, M Pierre Marie, and M Gilbert Ballet, M Brissaut was unanimously elected The new professor is well known as one of the most gifted and brilliant writers of the medical faculty Although he has not directly interested himself in the history of medicine he has written a little book upon popular terms for illnesses and matters having to do with medicine and their origin which is a veritable *chef d'œuvre* The Municipal Council has not yet given its decision as to who is to occupy the new chairs of Gynæcology and Pædiatrics which have just been founded To the names of those actually in the field—namely, Dr Richelot, Dr Pozzi, and Dr Hartmann—must be added that of Dr Doyen

May 23rd.

ROME

(FROM OUR OWN CORRESPONDENT)

Centenary of Volta's Invention of the Pile

THAT "the future belongs to electricity" was largely in evidence on May 20th, when His Majesty King Humbert opened the "Electric World's Show" at Como in honour of the invention of the pile by Alessandro Volta in the May of 1799 No effort has been wanting on the part of the great industrial centres of the Alta Italia or on that of the King's Government to heighten its attractions and to ensure its success, and when I mention its 11 galleries covering an area of 20 000 square metres and accommodating the specimen work of 1000 exhibitors, many of them foreign and nearly all of them of world wide fame, I may absolve myself, as the Scottish law phrase runs from "condescending on particulars" In these columns[1] I drew attention to the medical interest of the exhibition—an interest dating from Galvani, Volta s great predecessor, and carried on through special therapeutic developments by Nobili, and still further and more widely by Matteucci, till "electricity in its application to the healing art" may as truly be called an "Italian contribution," as chemistry has been claimed by Professor Wurz as a "French science" There are other attractions to Como at this season especially, but these fall into the second line in presence of this wondrous display of human contrivance and energy, bequeathed by the century now nearing its end to its imminent successor and heir

Protection of Women and Children in Factories and Mines

The deteriorating physique of the Italian labouring poor is traced to many causes—not least to the employment of women and children in works or industries unsuited to their age or sex Not an hour too soon a Bill has been introduced into Parliament for the prevention of this abuse It is now before me and a selection from its main provisions will indicate its salutary tenour —1 No woman and no child under 15 years of age shall be employed in factories served by more than 10 hands or provided with a "motor" or in excavations or in mines without authorisation of the Prefect acting on medical advice as to the health and capacity of the said woman or child 2. By Royal Decree, inspired by the Consiglio Superiore di Sanità and by the Consiglio dell' Industria, will be determined the dangerous and unhealthy works forbidden to children of both sexes under 15 years of age or to women in their minority, and there will also be determined those works in which they may be employed under specified conditions of age, including observance of a special time table of daily work and of technico hygienic precautions also specified 3 Children under 10 years of age shall be absolutely excluded from serving in industrial establishments, those under 14 years of age shall equally be excluded from work underground in excavations and mines and those under 12 years of age from work above ground 4 Women in their minority shall be excluded from underground service 5 Night-work carried on in industrial establishments, in excavations, and in mines is forbidden to children of both sexes who have not completed their fifteenth year and to women in their minority who when the Bill shall have become law are not found already employed 6 Children of both sexes

[1] THE LANCET, Feb 25th 1899 p. 534, "The Mechanism of Electrotherapeutics."

TYPHOID FEVER IN SOUTH WALES — At the meeting of the Llangyfelach District Council held on May 16th Dr Trafford Mitchell made a special report upon the outbreak of typhoid fever at Pontardulais (Glamorganshire) He stated that there were 20 cases occurring in 12 hours The disease was imported from Carmarthenshire and its spread was attributed to a defective water supply and the absence of a proper drainage system Dr Mitchell added that these defective sanitary arrangements had been pointed out in annual reports by his predecessor and by himself

BRITISH MEDICAL TEMPERANCE ASSOCIATION — The twenty-third annual meeting of this association was held on May 18th at the London Temperance Hospital, the president, Professor Sims Woodhead, being in the chair The honorary secretary, Dr Ridge, read the annual report which showed a considerable increase during the year, the members now being 484, the student associates 495, and the associates (laymen) 4 Following the annual business meeting the ceremony of unveiling a large brass tablet to the memory of the late President, Sir B W Richardson, was performed by Mrs Sims Woodhead Speeches were delivered by Professor Woodhead, Dr T Morton Rev Canon Barker, Mr A Y Nutt, Alderman Strong, Dr Cooper Key Dr Ridge, Surgeon Major Poole, and Rev Dawson Burns The inscription on the tablet, which is embellished with a good likeness of Sir Benjamin Richardson in profile, is as follows 'In memory of Sir Benjamin Ward Richardson, Knt, M D, LL D, F R S, F.R.C.P, who died on Nov 21st, 1896, for 17 years the honoured and esteemed President of the British Medical Temperance Association and for four years Senior Physician to this hospital This tablet is placed here by members of the association with the sympathy and by the kind permission of the Board of the London Temperance Hospital in affectionate remembrance of his invaluable services to the cause of temperance" Letters regretting their inability to attend were received from the Presidents of the Royal Colleges of Physicians of London and Surgeons of England, from Sir Richard Thorne, Rev Dr Adler, the Chief Rabbi, Professor McKendrick, Mr V Horsley, Professor Simpson, and others

Parliamentary Intelligence.

HOUSE OF LORDS

THURSDAY MAY 18TH.

Oysters Bill.

LORD HARRIS at this sitting moved the second reading of the Oysters Bill. He said the measure was intended to be another step in the legislative process as exhibited in the Contagious Diseases (Animals) Act and other Acts for securing more sanitary surroundings for creatures designed for the food of man. There were several Acts of Parliament which applied to oysters, in particular the Fisheries Act of 1877 which empowered the Board of Trade to prohibit the dredging of oysters on certain banks. The county council or the Local Government Board were empowered to have the water examined in which oysters were laid in order to see whether there were any insanitary conditions affecting them. The causes which rendered it necessary in the opinion of the Government to bring forward this Bill were primarily the grave suspicions which had attached to the oyster of late years. As long ago as 1850 Sir Charles Cameron, the medical officer of health of Dublin read a paper on the possible relation of typhoid fever to the consumption of oysters and the risk of sewage contamination to oysters in Dublin Bay In 1893 an outbreak of cholera in this country raised a very strong suspicion about oysters and at that time official representations were made to the Local Government Board as to the condition and storing of oysters sent to the market. In 1894 the suspicion was not confined to this country It spread to the United States, while in France in consequence of an outbreak of enteric fever in a small village near the coast, inquiries were made by a medical practitioner who gave it as his opinion that the outbreak could be traced undoubtedly to the consumption of some oysters brought there. In 1893 an outbreak in Essex induced the Local Government Board to cause an inquiry to be made by Dr Buchanan who was satisfied that the outbreak was due to oysters which had been taken up from certain layers at a noted town on the Essex coast. In consequence of these suspicions and some representations made by medical men, as well as from the pressure brought to bear by local authorities and dealers in oysters whose trade was seriously affected by these suspicions, the Local Government Board determined in 1895 that its medical department should undertake a comprehensive inquiry into the circumstances in which the oyster was cultivated and stored around our coast. Dr Bulstrode reported that the oyster ponds in several places were in special danger of sewage pollution, and as the result of his inquiry a bacteriological investigation was undertaken by Dr Klein. He after an exhaustive series of experiments, found that oysters kept for a time in water previously infected with the typhoid bacillus harboured the bacillus for four nine, or 16 days after removal and that the oyster nevertheless seemed perfectly fresh and good, although the bacillus recovered from it had all the characteristics of the typical typhoid bacillus used for the experiment. The medical officer of health of Brighton had reported that cases of enteric fever had resulted from the consumption of oysters produced at one of the places dealt with in Dr Bulstrode's report. Sir William Broadbent and other great authorities in this and other countries had declared their conviction as to the communication of typhoid fever by oyster consumption, and the Local Government Board had been urged by a powerful deputation representative of 28 of the largest towns in the kingdom to introduce some legislation on the subject. The evidence in favour of legislation was overwhelming and many of those engaged in the oyster trade would welcome it as tending to remove suspicion from their beds. The Bill empowered the county councils to test the water in which oysters were laid and to prohibit the removal of oysters for 10 days if they discovered contamination The owner had an appeal to the Local Government Board and the Local Government Board had power to act if the county council failed to do so. He had no wish to hurry the Bill through, but he hoped that their lordships would pass the second reading now and time would be allowed for the consideration of its provisions before the Committee stage.—The Bill was read a second time without debate.

HOUSE OF COMMONS.

THURSDAY, MAY 18TH.

Medical Men and the Compensation Act.

MR PICKARD asked the Home Secretary whether he was aware that among other medical officers of indemnity societies one Dr. Macphail of Barnsley especially assumed that he had power under the Compensation Act, 1897 to insist upon patients submitting themselves for examination at his office or surgery at Barnsley and in cases where workmen had been injured wrote to them that they must so attend on certain days and at certain times whether this or any other medical man could under the Act order any injured workman to attend his office or surgery for the purpose of examination seeing that he was simply an insurance or an indemnity association officer and if such action on the part of a medical officer was a violation of the Act what steps he would take to prevent such practices in the future —Sir MATTHEW WHITE RIDLEY replied I have not heard of the case referred to I presume that the hon. Member is referring to cases in which a workman has given notice of an accident or is in receipt of a weekly payment. In these cases the Act requires a workman to "submit himself for examination by a medical practitioner provided by the employer or by an insurance society It is impossible for me to lay down any general rule as to when and how this obligation should be fulfilled and I have no power to interfere in the matter

Feeble minded Children.

Sir JOHN GORST in reply to Mr ERNEST FLOWER, said that the Bill dealing with feeble-minded children was in an advanced stage of preparation, but he was unable to say when it would be introduced.

FRIDAY, MAY 19TH.

Tuberculosis in Cattle.

MR CHANNING asked the President of the Local Government Board whether he was aware that there was now no proper inspection of the carcasses of imported cattle, of which about 3000 were weekly slaughtered at Deptford and large numbers elsewhere and whether, having regard to the large proportion of tuberculosis found to exist in cattle slaughtered and inspected for the detection of pleuro-pneumonia he would arrange for an adequate staff to examine the carcasses immediately after slaughter before removal of the offal.—MR CHAPLIN said he had made inquiries concerning the foreign cattle market at Deptford which was the only one specifically referred to in the question and he was informed that in addition to the inspection of live animals by two veterinary inspectors appointed by the Board of Agriculture there was a close inspection of the carcasses. This latter inspection was carried out by an inspector specially appointed by the Corporation of London who devoted his whole time to the duty and who acted under the supervision of a veterinary inspector of the corporation and the superintendent of the market. He understood that the cases of tuberculosis in that market were extremely rare—only two had occurred in the last 12 months.

Metropolitan Water Companies Bill.

The amendments made in the Bill by the House of Lords were brought up and agreed to without debate. The measure now awaits the Royal Assent before becoming law

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor not later than 9 o'clock on the Thursday morning of each week, for publication in the next number

ALCOCK, G H., L.R.C.P Lond. M.R.C.S has been appointed Medical Officer for the Pinchbeck Sanitary District of the Spalding Union.

BYFORD W F L.R.C P Lond. M.R.C.S., has been appointed Medical Officer for the No. 1 Sanitary District of the Ruthin Union, vice W D Jones resigned.

CHALDECOTT J HENRY L.R.C.P Lond., F F P S Glasg., has been appointed Honorary Anæsthetist to St. John's Hospital for Diseases of the Skin, London.

CHILCOTT E. S., L.R.C P Lond. M.R.C S, has been re-appointed Medical Officer of Health by the Itchen Urban District Council.

CROWLEY RALPH H., M.D Lond. M.R.C P M.R.C S has been appointed Workhouse Medical Officer and Visiting Physician to the Hospital by the Bradford Board of Guardians.

DAVEY S., M.R.C S L.R.C.P D.P H. Lond. has been appointed Medical Officer of Health to the Urban District Council of Caterham.

nursing and the larger number were brought from Blackwell's Island, where they had been sent as vagrants or paupers or sometimes prisoners, and many could neither read nor write Having decided that a reform in the nursing was imperative as a preliminary to reform in the general system a sub-committee was appointed to plan for a training school for nurses The project was received with enthusiasm and $22,385 were contributed to start the school Through the influence of one of the Commissioners of the Board of Charities a reluctant consent was obtained from the board to allow nursing in five wards in Bellevue, for which the committee was to defray all the expense beyond that paid under the old system In March a house was hired near the hospital for a home for the nurses and the committee engaged to take charge of the wards on May 1st. The school started its career amid a good deal of opposition, but it never wavered from its high ideals, and the principles accepted from Miss Nightingale have been faithfully followed, not only at Bellevue, but by all the schools subsequently founded up to the present time

The Charities of the State of New York

The New York State Board of Charities reports that the statistics covering the fiscal year, collected by the board from the officers of charitable institutions, show that the public and private charities in this State which are subject to the supervision of, and which report to, the board had an annual income exceeding $23,000,000, that they expended nearly $22,000,000, and owned real and personal property conservatively estimated to be worth $103,000,000, also that within the year in question they administered charitable assistance of various kinds, more or less costly, to a great army reported as numbering over 2,500,000 beneficiaries These figures indicate the gigantic extent to which the charities of New York have grown and emphasise the necessity for the best and wisest methods of charitable administration in order that the poor may be most suitably relieved, while pauperism and its attendant evils, which constitute a dangerous and hurtful drain upon the industrial energy of the State, are diminished to the fullest extent practicable

May 18th.

Medical News.

SOCIETY OF APOTHECARIES OF LONDON—In May the following candidates passed in the subjects indicated —

Surgery—G H Bedford (Section II), Guy's Hospital P Cator, St. Bartholomew's Hospital, T A E Fawcett (Section II) Leeds A Killick (Sections I and II.) Cambridge and London Hospital D V Lowndes (Section I) Westminster Hospital A Orme (Section I) London Hospital V S Partridge (Section I), Charing cross Hospital W Sisam (Section II) Birmingham J M. Twentyman, Cambridge and King's College Hospital and R. Le G Worsley (Section II), St. George's Hospital and Durham.

Medicine.—E L. D Dewdney King's College Hospital R. F Ellery (Section I) St. Bartholomew's Hospital; T A. E. Fawcett (Section II), Leeds; A. Orme (Section I) London Hospital O. C Sibley Middlesex Hospital W Sisam (Section II) Birmingham and H R. Weston (Section I) St. George's Hospital.

Forensic Medicine.—E L. D Dewdney, King's College Hospital S H. Longhurst, Guy's Hospital A. Orme, London Hospital O C Sibley Middlesex Hospital, and H. E Weston, St. George's Hospital.

Midwifery — T Burdekin, University College Hospital, A F Carlyon Middlesex Hospital W J H Hepworth, London Hospital, T E Holman, Guy's Hospital, H. N Horton, Middlesex Hospital, A. Killick, Cambridge and London Hospital W Sisam, Birmingham and F J Waldmeier, London Hospital.

The diploma of the Society was granted to the following candidates entitling them to practise in medicine, surgery, and midwifery E. L. D. Dewdney, T A. E. Fawcett, S H. Longhurst, W Sisam, J M. Twentyman, and R. Le G Worsley,

FOREIGN UNIVERSITY INTELLIGENCE—*Basle* Dr Otto Hildebrand of Berlin has been appointed to succeed the late Dr Socins in the chair of Surgery. He is editor of the *Jahresberichte über die Fortschritte der Chirurgie*—*Berlin* Dr Beckenheimer of Würzburg has been appointed Assistant in the Institute for Infectious Diseases—*Göttingen* Dr Erwin von Esmarch of Königsberg has been appointed Professor of Hygiene in succession to the late Dr Wolffhugel—*Lemberg* Dr Franz Kosminski has been recognised as *privat-docent* of Midwifery and Gynæcology—*Munich* Dr Gudden has declined the invitation to succeed to Professor Rosenberger's chair of Surgery in Würzburg Dr E Weiland has been recognised as *privat-docent* of Physiology—*Prague* (*German University*) Dr Max Sänger of Leipsic has been appointed Professor of Midwifery and Gynæcology—*Vienna* Dr Gustav Singer has been recognised as *privat-docent* in Internal Medicine

ROYAL COLLEGE OF SURGEONS IN IRELAND FELLOWSHIP EXAMINATION — The following gentlemen having passed the necessary examination have been admitted Fellows of the College Mr Denis Kennedy, Mr John Murray Redington, and Mr Lawder Thomas Whelan—The following gentlemen have passed the primary part of the examinations for the Fellowship Mr John F L Keegan, Mr Thomas J Nicholl, Mr William G T Posnett, and Mr John White

ROYAL ALBERT HOSPITAL, DEVONPORT — A meeting of the subscribers of this institution was held on May 15th to consider a proposal for enlarging and improving the hospital It was eventually decided to erect a new nurses' home at a cost of £2200 and to provide isolation wards, consulting rooms for the medical staff, &c, at an estimated expenditure of about £1500 Sir John Jackson has promised £500 of this sum provided that £1500 more be raised within 12 months

WEST CORNWALL WOMEN'S HOSPITAL, REDRUTH—The children's ward recently added to the West Cornwall Women's Hospital, Redruth, was formally opened by Mr Passmore Edwards on May 17th The ward is to commemorate the Queen's Diamond Jubilee The cost of the building has been £508, of which sum Mr Edwards has contributed £478 The furnishing of the ward amounted to £200 and this amount was given by Messrs S and T Trounson

BIRKENHEAD MEDICAL SOCIETY—The annual meeting of this society was held on May 5th, Mr H Nazeby Harrington, President, being in the chair The annual report and treasurer's statement of accounts were read and passed The following office-bearers were elected for the ensuing year—President Mr H, Nazeby Harrington Vice President Dr Josepli Blood Treasurer Dr James Pinkerton Secretary Dr W Leask, Prenton road West Librarian Mr S Wilkinson Council Mr A H Butcher, Dr W R Floyd, Mr J H Fardon, Dr R O Morris, and Dr L D Temple The first monthly meeting of the new session will be held in October

UNIVERSITY OF CAMBRIDGE — In connexion with the jubilee of Professor Sir George Stokes on June 2nd the honorary degree of Doctor of Science is to be conferred on the following distinguished physicists and mathematicians Professor Cornu, Professor Darboux, Professor Kohlrausch, Professor Michelson, Professor Mittag Leffler, Professor Quincke, and Professor Voigt.—The following have been appointed examiners for medical and surgical degrees Medicine Dr Lees, Dr Macalister, Dr S Martin, and Dr Mitchell Bruce Surgery Mr Pitts Professor Chiene, Professor Watson Cheyne, and Mr Golding Bird Midwifery Dr Cullingworth and Dr Barbour—A contribution of £1000 has been made from the funds of the State Medicine Syndicate towards the cost of the new buildings for the Medical School and a grant of £50 in aid of the course of instruction in bacteriology provided for candidates for the Diploma in Public Health—Mr W Bateson will during next year deliver the course of lectures in Zoology as deputy for Professor Newton

LITERARY INTELLIGENCE—The following are some of the announcements in Messrs Williams and Norgate's scientific book circular for May "Die Spiele der Menschen" (Sports and Games), by K Groos—"Allgemeine Biologie," II Vererbung und Entwickelung (General Biology Second volume Inheritance and Evolution), by Professor M Kassowitz—"Die Leitungsbahnen im Gehirn und Rückenmark" (Nerve Tracts of the Brain and Spinal Cord), by Professor W von Bechterew—"Traité des Maladies de l'Enfance" (Diseases of Children), by Dr Jules Comby—"Atlas de Microbiologie," by Dr E Macé—"Ueber die Einbettung des menschlichen Eies und das früheste bisher bekannte menschliche Placentationsstadium" (The Embedding of the Human Ovum and the Earliest Stage hitherto known of the Human Placenta), by Dr H Peters—"Traité de Médecine," by Dr Bouchard and Dr Brissaud, second volume, Fevers—"Das Füllen der Zähne mit Amalgam" (Amalgam Stoppings in Dentistry), by A. Witzel—"Handbuch der Fleischbeschau" (Manual of Meat Inspection for Veterinary Surgeons, Medical Men, and Magistrates), by R Ostertag

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 25th, 1899.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rainfall.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
May 19	30·00	S W	...	110	64	50	52	56	Cloudy
20	29·69	S W	0·06	68	64	55	55	57	Cloudy
" 21	29·93	S.W	0·29	97	61	54	56	61	Cloudy
" 22	29·96	S.E.	0·09	67	57	50	52	54	Raining
" 23	29·96	S.W	0·06	112	66	48	54	56	Fine
" 24	29·70	S.W	0·05	109	64	52	53	56	Cloudy
" 25	29·82	N.E.	0·07	76	52	43	47	50	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS.

MONDAY (29th).—London (2 P.M.) St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) St. George's (2 P.M.), St. Mary's (2.30 P.M.) Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.)

TUESDAY (30th).—London (2 P.M.) St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.) Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.) St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (31st).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), sympa George's (Ophthalmic 1 P.M.) St. Mary's (2 P.M.), National Ortho- London (10 A.M.), St. Peter's (2 P.M.) Samaritan (2.30 P.M.), Gt. d-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), West- of his inva P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.)

Letters regretta St. Bartholomew's (1.30 P.M.), St. Thomas's from the Presiden y College (2 P.M.), Charing-cross (3 P.M.), St. London and Surgeons on (2 P.M.), King's College (2 P.M.), Middlesex Rev Dr Adler, the Ch 30 P.M.), Soho-square (2 P.M.), North-West Mr V Horsley, Professor S P.M.), Gt. Northern Central (Gynæco- n (2.30 P.M.), London Throat (2 P.M.)

St. Bartholomew's (1.30 P.M.), St.), Middlesex (1.30 P.M.), King's College (2 P.M.) Cancer (2 P.M.), Chelsea et London (2.30 P.M.),), Middlesex (1.30 P.M.), ity College (9.15 P.M.), St. Mary's (10 P.M.), London Ophthalmic (1.30 P.M.), and the e performed daily street, Cavendish t Notes on the ad notes on the TOLOGICAL Meeting speak. (The

Parliamentary Intel

HOUSE OF LORDS

THURSDAY MAY 18TH.

Oysters Bill.

LORD HARRIS at this sitting moved the second re Bill. He said the measure was intended to be a legislative process as exhibited in the Contagious Act and other Acts for securing more sanitary creatures designed for the food of man. There were Parliament which applied to oysters, in particular the 1877 which empowered the Board of Trade to prohibit of oysters on certain banks. The county council or the ment Board were empowered to have the water examine oysters were laid in order to see whether there were any conditions affecting them. The causes which rendered it neces the opinion of the Government to bring forward this Bill were prima the grave suspicions which had attached to the oyster of late years. As long ago as 1880 Sir Charles Cameron, the medical officer of health of Dublin read a paper on the possible relation of typhoid fever to the consumption of oysters and the risk of sewage contamination to oysters in Dublin Bay In 1893 an outbreak of cholera in this country raised a very strong suspicion about oysters and at that time official representations were made to the Local Government Board as to the condition and storing of oysters sent to the market. In 1894 the suspicion was not confined to this country It spread to the United States, while in France in consequence of an outbreak of enteric fever in a small village near the coast, inquiries were made by a medical practitioner who gave it as his opinion that the outbreak could be traced undoubtedly to the consumption of some oysters brought there. In 1893 an outbreak in Essex induced the Local Government Board to cause an inquiry to be made by Dr Buchanan who was satisfied that the outbreak was due to oysters which had been taken up from certain layers at a noted town on the Essex coast. In consequence of these suspicions and some representations made by medical men, as well as from the pressure brought to bear by local authorities and dealers in oysters whose trade was seriously affected by these suspicions, the Local Government Board determined in 1895 that its medical department should undertake a comprehensive inquiry into the circumstances in which the oyster was cultivated and stored around our coast. Dr Bulstrode reported that the oyster ponds in several places were in special danger of sewage pollution, and as the result of his inquiry a bacteriological investigation was undertaken by Dr Klein. He, after an exhaustive series of experiments found that oysters kept for a time in water previously infected with the typhoid bacillus harboured the bacillus for four nine, or 16 days after removal and that the oyster nevertheless seemed perfectly fresh and good although the bacillus recovered from it had all

THURSDAY (1st).—CENTRAL LONDON THROAT NOSE, AND EAR HOSPITAL (Gray's Inn road, W C) – 5 P M. Dr D Grant: Diagnosis and Treatment of Nerve Dea ness.

CHARING-CROSS HOSPITAL.—4 P.M. Dr W Hunter Pathological Demonstration. (Post-Graduate Course).

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond street, W C).—4 P.M Dr Colman: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W).—5 P.M. Dr Abraham: Diagnosis and Treatment of some Diseases of the Skin.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER S NOTICES

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DAVEY, S., M.R.C.S., L.R.C.P. LANCET OFFICES, 423, STRAND, Medical Officer of I Caterham.

FEATHERSTONE, G W B., L.R.C P Lond. M.R.C S has been appointed Medical Officer for the Radnorshire Sanitary District of the Hay Union.

GODWIN F J M R.C S, L.R.C P, has been appointed House Surgeon to the Infirmary, Burton on Trent.

HAWKINS-AMBLER, G A. F R.C S Edin has been appointed Assistant-Surgeon to the Liverpool Stanley Hospital.

HODSON, T G S. M.D Durh., L.R.C P Lond., M R.C S, has been appointed *pro tem* Medical Officer for the Bitterne Sanitary District of the South Stoneham Union

JACKSON THOS., M.D Edin., M R.C S has been appointed Medical Officer for the First Division of the Greystoke Sanitary District of the Penrith Union

JOHNSTONE, B K., L.R.C S L.R.C P Edin., L.F P S Glasg, has been appointed an Acting Assistant Surgeon in the United States Army ranking as a first lieutenant. He is now serving in the Philippine Islands.

MALINS, H. M.B., C M. Edin has been appointed Assistant Medical Officer at the Infirmary Parish of St. Marylebone, London.

MATHEW C P L.R.C P Lond. M.R.C S. has been appointed Medical Officer for the Tregony Sanitary District of the Truro Union.

READ B T L.R.C P Lond. M R.C S. has been appointed Medical Officer for the Odiham Sanitary District of the Hartley Wintney Union.

RUSSELL, J M.B C M.Aberd has been appointed Assistant Honorary Physician, North Staffordshire Infirmary, vice T T Cockill resigned.

STONE, F W S. L.R.C P., L.R.C S Irel., has been appointed Medical Officer for the Bilton Sanitary District of the Warmley Out-relief Union.

THOMPSON S R L.R.C.P Lond., M.R.C S, has been re-appointed Medical Officer of the Workhouse, St. Olave s Union

TODD G D, L.R.C.P Edin. M.R.C.S has been appointed Medical Officer for the Selby Sanitary District and the Workhouse of the Selby Union.

WARD EDWARD M.B B C M.R.C S. has been appointed to the Professorship of Surgery the Yorkshire College Department of Medicine, vice Professor Mayo Robson, retired.

YONGE, EUGENE S., M D has been appointed Honorary Assistant Physician to the Manchester Hospital for Consumption and Diseases of the Throat, vice W Milligan, resigned.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

ASTON UNION —Resident Assistant Medical Officer at the Workhouse, Erdington, near Birmingham Salary £130 per annum, rising annually by £10 to a maximum of £150 per annum, with furnished apartments, rations, washing, &c. Applications to the Clerk to the Guardians, Union Offices, Vauxhall road Birmingham.

BATH.—EASTERN DISPENSARY —Resident Medical Officer, Salary £130 a year, with furnished apartments, coal, gas, and domestic attendance. Applications to Colonel Eyre, Hon. Sec. Rockville, Lansdown, Bath.

BEDFORD COUNTY HOSPITAL.—House Surgeon for one year Salary £100, with apartments, board, lodging and washing.

BETHNAL GREEN BOARD OF GUARDIANS—Second Assistant Medical Officer at the Workhouse and Infirmary at Waterloo-road, Victoria park, N E., for six months. Salary at the rate of £80 per annum (payable monthly) with rations, furnished apartments, and washing and £3 per annum in lieu of beer Applications to the Clerk to the Board Guardians' Offices Bishop s-road, Victoria park, N E,

BIRMINGHAM GENERAL DISPENSARY —Two Resident Locum Tenens for the Staff of Resident Surgeons for about two months. Salary four guineas a week without board.

BOROUGH OF HOVE, Sussex.—Medical Officer of Health and Medical Officer for the Hospital for Infectious Diseases. Salary £450 a year rising £25 annually to £550. Applications to the Town Clerk, Town Hall, Hove.

BURGH OF PAISLEY —Medical Officer of Health. Salary £400 per annum. Applications to the Clerk to the Local Authority Municipal Buildings Paisley

BURY INFIRMARY —Junior House Surgeon. Salary £60 with board, residence, and attendance.

CARDIFF UNION —Assistant Medical Officer for the Workhouse for one year Salary £100 per annum, with rations, apartments, atten- ance, and washing Subject to statutory deduction. Applicat- to the Clerk, Queen s Chambers, Cardiff

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST Vi- park, E.—Second House Physician for six months. Salar- rate of £30 per annum, with board and residence.

COUNTY ASYLUM, Gloucester —Locum Tenens for about fou- Salary £3 3s per week and all found (but no liquor).

CRAIGLEITH POORHOUSE AND HOSPITAL, Edinburgh —Resi- Officer Salary at the rate of £80 per annum, with - cations to the Clerk, Parish Council Chambers, Edinburgh.

DEVONSHIRE HOSPITAL, Buxton, Derbyshire.—Assistan- Salary £50 per annum with furnished apart- washing

EAST LONDON HOSPITAL FOR CHILDREN AND DIS- Glamis-road, Shadwell E.—House Physicia- dence, &c. provided, and an honorarium o- ditionally

EDAY Orkney —Medical Officer male or fema- Parish Council £50. from the Medical Asso- tions to the Clerk of Parish Council Eda-

HARRIS PARISH COUNCIL.—Medical Officer- the Southern Division of Harris Sa- Applications to the Clerk, Mr Thos. - N B.

HOLLOWAY SANATORIUM, Virginia Water — Officer Salary commencing at £300 lodging, and washing

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Dr Franz Kosminski has
of Midwifery and Gynæ
declined the invitation to
's chair of Surgery in
een recognised as *privat-*
(*German University*) Dr

HOSPITAL FOR SICK CHILDREN Great Ormond street, Bloomsbury London.—Medical Registrar and Pathologist for one year Honorarium of 50 guineas Also Surgical Registrar for one year Honorarium of £40. Also House Physician for six months. Unmarried Salary £20 with board and residence in the hospital. Also Anæsthetist for one year Honorarium £15 15s. Also Assistant Physician Also House Surgeon for six months. Unmarried. Salary £20, with board and residence in the hospital.

LONDON COUNTY ASYLUM, Claybury Woodford Bridge Essex.—Junior Assistant Medical Officer male. Salary £150 per annum, with board furnished apartments, and washing Applications to the Clerk of the Asylums Committee Offices, 6, Waterloo-place, S.W

METROPOLITAN ASYLUMS BOARD —Assistant Medical Officer at the South Eastern Fever Hospital Hatfield street New Cross S.E. Unmarried. Salary £160 first year £180 second year and £200 the third and subsequent years of service, with board lodging, attendance, and washing Subject to statutory deduction. Applications to the Clerk to the Board, Norfolk street, Strand W C

NORTH EASTERN HOSPITAL FOR CHILDREN Hackney road, Shoreditch —Surgeon Also House Surgeon for six months. Salary at the rate of £50 per annum Applications to the Secretary City Office, 27 Clement s-lane, Lombard street, E.C

NORTH WEST LONDON HOSPITAL, Kentish Town road, N W —Dental Surgeon. Also Assistant Resident Medical Officer for six months. Salary at the rate of £30 per annum.

ROYAL SOUTH HANTS INFIRMARY Southampton.—Assistant House Surgeon for six months. Honorarium £10, with board and rooms in the hospital.

SCHOOL BOARD FOR LONDON —Medical Officer for the training ship *Shaftesbury* lying off Grays, Essex. Commencing salary £100 a year, which may be increased £10 annually to £150 a year Applications to the Clerk, School Board Offices Victoria Embankment, W C

SHAFTESBURY HOUSE PRIVATE ASYLUM Formby near Liverpool.—Junior Medical Officer Salary £50 per annum with board lodging and washing

STAFFORDSHIRE GENERAL INFIRMARY Stafford.—House Surgeon, for two years. Salary £100 per annum, with board lodging, and washing Also Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing

TILLERY COLLIERIES Abertillery —Surgeon. Applications to the Secretary Newall street Abertillery Mon.

TUNBRIDGE WELLS EYE AND EAR HOSPITAL.—Lady House Surgeon Salary £60 per annum, with board and residence -nual

VICTORIA HOSPITAL FOR CHILDREN Queen s-road, Chelsea, - and the VICTORIA CONVALESCENT HOME, Broadstairs.—Hou- for the for six months. Honorarium at the rate of £50 - board and lodging in the hospital. Harrington

WEST NORFOLK AND LYNN HOSPITAL, King's L- -surer Dr James Salary £80, rising annually £10 to £100, w- Prenton road West washing

WEST RIDING ASYLUM, Wadsley near - Mr A H Butcher, Medical Officer Salary £100 per - -ion, Dr R O Morris, and with board, &c.

WEST RIDING ASYLUM Wakefield -monthly meeting of the new Salary £100 per annum ri- £150, with furnished- ance.

CAMBRIDGE — In connexion

WOLVERHAMPTON AND - hampton.—House Professor Sir George Stokes on June 2nd lodging and wash- -ee of Doctor of Science is to be con
-owing distinguished physicists and mathe-
-ssor Cornu, Professor Darboux, Professor

Births,

-essor Michelson, Professor Mittag Leffler,
-, and Professor Voigt.—The following have
-xaminers for medical and surgical degrees
Lees, Dr Macalister, Dr S Martin, and Dr
- Surgery Mr Pitts, Professor Chiene, Pro-

BARCLAY SMITH,- Surgery Mr Pitts, Professor Chiene, Pro- wife of Edw- Cheyne, and Mr Golding Bird Midwifery

BOND —On Ma- -orth and Dr Barbour —A contribution of £1000 Bond, M - made from the funds of the State Medicine Syndi

DREW —On - regards the cost of the new buildings for the Medical J Dr- -l and a grant of £50 in aid of the course of instruction

JONES - bacteriology provided for candidates for the Diploma in

Public Health —Mr W Bateson will during next year deliver the course of lectures in Zoology as deputy for Professor Newton

LITERARY INTELLIGENCE —The following are some of the announcements in Messrs Williams and Norgate's scientific book circular for May "Die Spiele der Menschen" (Sports and Games), by K Groos —"Allgemeine Biologie" II Vererbung und Entwickelung (General Biology Second volume Inheritance and Evolution), by Professor M Kassowitz —"Die Leitungsbahnen im Gehirn und Rückenmark" (Nerve Tracts of the Brain and Spinal Cord), by Professor W von Bechterew —"Traité des Maladies de l'Enfance" (Diseases of Children), by Dr Jules Comby —"Atlas de Microbiologie," by Dr E Macé —"Ueber die Einbettung des menschlichen Eies und das früheste bisher bekannte menschliche Placentationsstadium" (The Embedding of the Human Ovum and the Earliest Stage hitherto known of the Human Placenta), by Dr H Peters —"Traité de Médecine," by Dr Bouchard and Dr Brissaud, second volume, Fevers —"Das Füllen der Zähne mit Amalgam" (Amalgam Stoppings in Dentistry), by A. Witzel —"Handbuch der Fleischbeschau" (Manual of Meat Inspection for Veterinary Surgeons, Medical Men, and Magistrates), by R Ostertag

THE POSITION OF QUACKS IN INDIA.

To the Editors of THE LANCET

SIRS,—There appears in the *New York Medical Journal* of March last a statement that the M.D degree of Chicago and Illinois is bogus. But still in continuation of the article there appears a statement that the said degree is granted under an International University Charter of the United States. Will you or any of your numerous readers be good enough to answer the following questions—viz., whether men holding such M.D degrees in India under the said charter are duly qualified men and whether they can legally set up in practice or join in partnership with other medical men holding British qualifications? Also, can such men give legitimate death certificates or certificates of any other illness which can be accepted in a court of law?

This question of their legitimacy arises as nowadays in India a good many quacks, second and third year plucked students of the medical colleges in India and several office clerks, resort to buy this bogus degree under the said charter and pose themselves as legally qualified men, thus taking advantage over the innocent and the credulous.

I am, Sirs, yours faithfully

Bombay April 28th, 1899. MEDICO

RAILWAY STATIONS AND VENEREAL DISEASE.

To the Editors of THE LANCET.

SIRS,—We are accustomed to smile at tales of the innocent contraction of venereal disease. The possibility is none the less appalling. Through one of the large railway termini in London there is a permanent right of way This right is, I believe the only excuse for the fact that the station has become a recognised haunt for prostitutes. Some months ago I saw emerge from the ladies waiting room a woman of so gross an aspect that I followed her and watched her plying her trade in a neighbouring street. Since then I have on several occasions kept an eye upon that waiting room door. Consequently I have no hesitation in saying that this room is used night after night by some of the most unfortunate of the unfortunate class.

This is a subject which, no doubt is ancient history to many It is also a subject which should not be shirked. These women presumably use the lavatories largely—a fact which might nearly touch the female relations of any one of us. THE LANCET has done pioneer work in many a reform. This, too is a matter upon which more daylight might be shed with great advantage.

I am, Sirs, yours faithfully

May 1th, 1899 SIDNEY VINES

POISONED BY TEA DRINKING

ACCORDING to the newspapers a coroner's jury at Poplar has returned a verdict of "Death by tea poisoning." The deceased, who was a male furniture-dealer aged 33 years, was in the habit of consuming "an enormous amount of tea," often drinking eight cups before leaving home in the morning" His nervous system had been nearly destroyed, in the opinion of a medical witness, but although that was no doubt the case it seems difficult to understand how death sufficiently sudden to call for judicial inquiry could have supervened.

AN APPEAL.

To the Editors of THE LANCET.

SIRS,—Permit me through your columns to make an appeal to the profession on behalf of the family of the late Mr. Joseph Thomas Cooke L.R.C.P & S. Edin., who died from phthisis at Buxton at the early age of 35 years. He practised at Radcliffe in Lancashire for about six years, but his health broke down in 1897 and in the hope of staying the progress of the disease he took an appointment on board a steamer running to the East Indies. About 13 months later he became absolutely incapacitated for work and nine weeks before his death he removed to Buxton. The circumstances connected with his death are of a somewhat painful character as he has left a widow and three young children totally unprovided for. I have received a sympathetic letter from Sir Henry Littlejohn, saying that he knows of the case and offering the use of his name as a reference.

I am, Sirs, yours faithfully

SAMUEL HYDE.

Lismore House, Buxton, Derbyshire May 22nd, 1899.

P S.—The following gentlemen have already received subscriptions for the widow:—Dr J C Eames, Barnfield Stoneclough, Manchester and Mr Stanmore Bishop, 316, Oxford road, Manchester I shall also be pleased to receive subscriptions and I am sure that Sir Henry Littlejohn and Dr Steell, 96, Mosley-street, Manchester will assist in the same manner.

THE EMPLOYER'S MEDICAL MAN

To the Editors of THE LANCET.

SIRS,—Will you kindly favour me with your opinion as to the proper mode of procedure in the following case? A patient attended by myself and my qualified assistant was visited by his employer who expressed a wish (tantamount to a command) to have his medical man called in as a sort of medical superviser This interference on a par with that of the loquacious old woman with a sovereign remedy for every ill, was objected to by me and I declined to meet the medical man at the case especially as the patient himself was not only satisfied with the treatment adopted but also with the progress made and moreover had no desire for any other medical opinion. The employer's medical man, although not recognised as a consultant, having heard of my refusal to meet him was greatly surprised thereat nevertheless, at the instigation of the employer he went to the case The patient being in a dilemma naturally not wishing to forfeit his bread and-butter and at the same time loth to give up my services was recommended by me to choose the lesser evil and I gave up attending.

I am Sirs, yours faithfully

May 20th 1899. M.D

*** We do not understand our correspondent's objection to meet the employer's medical adviser in consultation. It appears to us such a consultation would have been a wise and satisfactory course for all parties and consent to it would not have implied any acknowledgment that the gentleman consulted had a right to supervise the treatment of the patient.—ED. L.

A QUESTION CONCERNING A ROYAL HOSPITAL.

To the Editors of THE LANCET

SIRS,—I have a letter in my possession from one Joseph Briggs, dated Royal Hospital, Dec. 3rd, 1771. He says in this letter that he has been there for four years and is much better in health now The letter was sent to Leeds but the postmark is obliterated and there is nothing to trace where it was sent from the postage rate is 6d. crossed out presumably paid on delivery to receiving office, and 10d. not crossed, presumably paid on receipt. I want to know what Royal Hospital was in existence in 1771 distant a sixpenny and tenpenny post from Leeds where a man could be for four years, and how I could get to see their record of names?

I am, Sirs, yours faithfully,

Bradford, May 22nd, 1899. X. Y Z.

*** Chelsea and Greenwich Hospitals both Royal foundations, were founded respectively in the years 1682 and 1694 Perhaps the letter came from one of these institutions and not from a regular hospital. —ED. L.

WANTED A HOME.

To the Editors of THE LANCET

SIRS —Can any of your readers tell me of a home where such a case as the following would be admitted? The patient is a youth aged 16 or 17 years, a collier who was kicked by a horse down in the pit. He sustained a compound depressed fracture of the skull for which he was trephined and the sequel is that he now has attacks of uncontrollable temper making him most violent and unmanageable by his parents I think that removal from his home and treatment by some firm-minded stranger might result in improvement, but convalescent homes do not admit such cases and his parents are too poor to send him to any paying institution. I should take it as a great favour if you could help me to discover an institution where he could be received.

I am Sirs, yours faithfully

Polesworth, Tamworth, May 22nd 1899 W H. SMART

M.D. (Cardiff).—Under the circumstances mentioned if the coroner allowed the fee to be paid the payment would not, we believe, be challenged. When the inquest is upon the body of a person who has died in a lunatic asylum, public hospital, or infirmary the medical officer is not entitled to a fee for making a post-mortem examination, but it is not so certain that he is not entitled to a fee for his attendance as a witness. However, we cannot advise our correspondent either to neglect the coroner's summons—for which there is a penalty—or to make a legal demand for the fee in the present state of the law

Paris.—We will make inquiries from our Paris correspondent, but we do not think that the opening desired will be easily met with. The address of the British hospital is Hertford Hospital, Paris.

Perplexed.—The question will be dealt with shortly in our columns. It is not possible for us to give a decision, we can only express an opinion.

Rex.—Yes.

During the week marked copies of the following newspapers have been received *Coventry Herald, Pontefract Express Warrington Guardian, Macclesfield Courier, Scotsman Lancaster Guardian Western Mercury Leicester Daily Post, Nottingham Express Glasgow Herald, Bradford Observer Manchester Guardian St. Andrew's Citizen, North British Mail, Bath Herald Accrington Observer Peterhead Sentinel, Gloucester Journal, East of Fife Record, Bury Guardian, Times of India, Pioneer Mail Cannock Chase Courier Midland Herald Local Government Chronicle, Troubridge Chronicle, Jarrow Express Cambridgeshire Times Kent Messenger Deal News Barrow Herald, Citizen, Builder Architect, Liverpool Daily Post, Brighton Gazette, Lincolnshire Chronicle Bristol Mercury Sanitary Record, Leeds Mercury West Lothian Courier City Press Mining Journal, Reading Mercury Glamorgan Free Press, Shrewsbury Chronicle, Hertfordshire Mercury Surrey Comet, Southampton Observer Guy's Hospital Gazette, East Essex and Halstead Times Surrey Advertiser Ulster Gazette, Rock, Cheadle Herald Local Government Journal, Ipswich Journal Worcester Herald, Weekly Standard (Blackburn) Jamaica Daily Telegraph, Chorley Standard, &c., &c.**

THE CLERGYMAN AND THE MEDICAL MAN

THE relations of the medical man to the clergyman should for obvious reasons be as close and as cordial as circumstances permit, and this we are glad to think is commonly the case. In an urban community they are necessarily much looser than they are in a village for in a town especially in a big city the medical man's patients will be distributed over the congregations of many denominations of clergymen, while the clergyman whatever his denomination or school of thought, will have in his congregation the patients of many different medical men. As a result there is not in town life the great bond between the medical practitioner and the clergyman which exists in parishes where their cure is largely identical. Still, though in a more indirect manner they can and do help each other immensely in the town, for many a hardworking man and woman although not communicative to both will be communicative to one or the other To some the clergyman appeals more forcibly as a friend and counsellor and to some the medical man If the clergyman and the medical man exchange confidences as far as the sanctity of the trust reposed in them allows each gains enormously in knowledge. The clergyman himself, not infrequently the largest almsgiver, is sure to be the recognised almoner of the neighbourhood A few words to him from the medical man may serve to direct a flow of practical charity by which the health of the breadwinner may be preserved to his family Similarly the medical man may learn from the clergyman details concerning the environment of his patients which from various motives had been concealed from him although of the first importance to his diagnosis and line of treatment. As long as this sort of coöperation has careful regard for the privileged nature of much that is told to the members of both professions it can only work for the public good

In the country in the same way but more directly and certainly, the general practitioner is able to look to the clergyman's labours as a most valuable adjunct to his practical work. Not only is the domestic environment of the patient so well known to the country clergyman that he is able to impart pieces of information to the medical man that may be invaluable as suggestions for medical ministration but his position towards his flock may enable him to give advice which would not always be accepted without resentment from a physician or surgeon. The public, especially the self respecting poor will generally do what they are told by the medical man if they think the advice good but if they do not see the *rationale* of the instructions which they have received they are apt to neglect them. Here is where the clergyman in the country may be particularly valuable to the medical man The rustic community will follow his suggestions without understanding them. But the simple trust in the clergyman is abused not infrequently by persons who will not confine themselves to their proper sphere but who aspire to be medical men also. The prescribing clergyman is an interesting but not quite harmless survival from the middle ages when the community turned as naturally to the monk for simples as for prayers. Many of our readers have come across the prescribing clergyman and we have introduced him to their notice at different times in these columns This is the man who shakes his head over the medical man's diagnosis and suggests that indigestion is really what he calls "gastric fever" or that the application which the patient has obtained from the regular source may well be discontinued that an ointment which clerical experience vouches to be most efficacious may be tried in its stead. Some clergymen have gone even further in the unorthodoxy of their therapeutics and have been found "colloguing with cancer-curers. If the practitioner in their neighbourhood objects to their interference with his *clientèle* or points out the unwisdom of their proceedings they attempt to get him replaced by some more complacent medical man This is done, among other ways by advertising a promising nucleus for sale or a house at a very low rent suitable for a medical man These things are perfectly well known to us to occur and our columns show that they are quite familiar to the medical profession. But they form grave exceptions to the usual rules which govern the relations of the clergyman and the medical man who for the most part work excellently well together in their private capacities.

The close connexions between public health and public morals—the certainty that in a locality where the former is bad the latter can never be good—compel the clergyman and the medical man to take similar views in matters of State medicine and sanitation. On the great field of morality the paths of the sanitarian and the spiritual teacher are always in the same direction. To take one example only, the clergyman preaches against fornication while the medical officer of health prevents five persons of varying sexes from sleeping in one bed. Each works in his own way towards the same end and it is almost unknown for a difference of opinion in principle to exist, while in detail the agreement is generally complete. But a letter from a medical correspondent which we now append shows that clergymen are not always liberally minded in matters of public health:—

To the Editors of THE LANCET.

SIRS,—I ask for your help under the following circumstances. There is a widespread and serious epidemic of whooping-cough in this parish and neighbourhood several children have already died. The medical officer of health has used his powers and ordered the day schools to be closed and written more than once to the vicar of this parish urging him also to close his Sunday school. This the vicar declines to do, expressing the fear that the Nonconformist bodies would "entice his children away" Upon it being represented to him that the Nonconformists also would probably promise to close their schools he replies that he cannot trust such promises Consequently all the efforts of our medical officer of health and the inconvenience caused by the closing of the day schools are rendered of no effect. I am, Sirs, yours faithfully

May 24th SENEX

It has not often been our experience to record a more unfortunate piece of perversity than is displayed by this clergyman. He nullifies all the work of the medical officer of health undertaken to stop the spread of a disagreeable and very dangerous epidemic among the children of the neighbourhood and his conduct, judging from his words quoted by "Senex," has its origin in a particularly narrow bigotry It is very unlikely that the Nonconformist schools of the district would keep their doors open in defiance of medical and public opinion when the board school and the Church school were closed but the frame of mind of the man who considers that the risk to the children of being captured by wicked Dissenters is graver than the risk of catching whooping-cough is one which we find it hard to imagine Speaking with all respect for the Established Church and with full knowledge of the excellent work done by Church schools, we cannot but think that the children who attend the classes of this particular clergyman might obtain more discreet tuition elsewhere.

"A MEDICAL HERO"

To the Editors of THE LANCET

SIRS,—After reading the account in THE LANCET of May 13th entitled "A Medical Hero, my uncle, Dr James Nicol of Llandudno, with whom I live, told me of the following incident in his early medical career similar in details to that of Mr Burns—an incident which he had seldom or never spoken of before About 60 years ago Dr Nicol (who is now 84 years of age and in comparatively fair health with the exception of chronic rheumatism in the back which prevents him from walking, but with intellect and memory perfectly unimpaired) was practising in Carnwath in Lanarkshire and was called to see a Mrs. Smith, wife of a baker in that village, who was seriously ill and to whom he and another practitioner, a Dr Paterson, who is since dead, had to apply the stomach pump. Unfortunately it would not act and he and Dr Paterson turn by turn about, sucked out the contents of the woman's stomach, who was poisoned by some agent unknown the woman rallied for a time but eventually died.

I am, Sirs, yours faithfully

May 15th, 1899 JANIE CHARLESWORTH.

"SUPERFLUOUS HAIR."

To the Editors of THE LANCET

SIRS —In answer to Mr Balmanno Squire's letter in THE LANCET of May 20th allow me to say that I have found that to reduce the hairs to a pale golden colour is sufficient to make them quite unnoticeable. The applications must be, as he remarks, thorough and repeated. The hair becomes very brittle and splits and breaks a good deal, but this I have looked upon as an advantage. As to irritation of the skin in my own experiments I have found that there is some but not more than quite disappears in a few hours with a good wash and a little vaseline. I always tell my patients to use an emollient application after using the lotion and have had no complaints on the subject.

I am, Sirs, yours faithfully

ETHEL M. N WILLIAMS, M.D Lond.

Newcastle-on Tyne, May 22nd, 1899.

To the Editors of THE LANCET

SIRS,—In regard to the above your correspondence column has been of the greatest value to me. May I through THE LANCET thank those who have replied to my letter on the subject and assure them that they have given me just the advice I wanted and have so done me a great service? I am Sirs, yours faithfully,

May 18th, 1899 M.D

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H. KINGSLEY HUNTER, L.S.A."

To the Editors of THE LANCET

SIRS —Kindly allow me to acknowledge the receipt of the following donations, making a total of £45 12s 9d.

I am, Sirs, yours faithfully

RIVERS WILLSON Treasurer

42, Wellington-square Oxford, May 23rd 1899

	£ s. d.		£ s. d.
Dr A. E Sansom ..	1 1 0	Mr C Biddle ..	0 10 6
A. W F S	0 10 0	Dr W Gayton	1 1 0
Dr T M. Allison	0 10 6	Mr Frank Boxall	2 2 0
Mr E. S Tylee ..	0 5 0	Dr A. Douglas Cowburn	1 1 0
Dr J D Windle	0 10 6		

A CANCER SOCIETY

To the Editors of THE LANCET

SIRS —I understand that a Cancer Society has been founded in London. I should feel obliged if any of your readers can give the name and address of the secretary

I am, Sirs, yours faithfully,

Ardwick, Manchester, May 23rd, 1899 R. MARTIN, M.D Aberd.

The Baillie Lectures

ON

FRAGMENTS OF PATHOLOGY AND THERAPEUTICS

Delivered at St George's Hospital on May 11th, 18th, and 25th, 1899,

BY W HOWSHIP DICKINSON, M D CANTAB., F R C P LOND,

CONSULTING PHYSICIAN TO ST GEORGE'S HOSPITAL AND TO THE HOSPITAL FOR SICK CHILDREN GREAT ORMOND-STREET
HONORARY FELLOW OF GONVILLE AND CAIUS COLLEGE
CORRESPONDING MEMBER OF THE ACADEMY OF MEDICINE OF NEW YORK.

LECTURE I

Delivered on May 11th, 1899

GENTLEMEN,—In casting about for subjects of the few lectures which as Baillie Lecturer it is my duty as well as my pride to deliver I looked back for matters which had formerly interested me but which for the most part I had never found time to shape into any organised form though I may have touched upon some of them briefly and incidentally in this theatre and in the wards I shall not confine myself to one topic but shall take up several almost as they come to hand, no common purpose may appear save that they all have to do in some way with disease and may be as little connected as are hospital patients in adjoining beds who suffer from different disorders If my subjects are various I may console myself with the reflection that I appeal to a variety of tastes and shall deem myself unfortunate if I am equally unpleasing to all

I propose to begin with a question of pathology In my last Baillie Lectures I dwelt upon some aspects of hypertrophy of the heart I shall commence these with some considerations regarding dilatation For those who are not finally repelled by this somewhat dull subject I shall endeavour to provide something of which the practical bearing is more obvious, I shall touch upon diet in certain disorders, upon the limitations which attend the use of meat extracts as food, upon the therapeutical effects of water, and finally, if time serves, upon the employment of superficial applications in deep disorders, directed as they often are, by considerations as superficial as themselves

DILATATION OF THE HEART, ESPECIALLY IN REFERENCE TO VALVE LESIONS.

Dilatation of the heart has occupied less attention than hypertrophy I dwelt upon the cardio-vascular question in my last Baillie Lectures and it is not my intention now to deal with this or any form of hypertrophy excepting by such incidental reference as is not to be avoided. Dilatation has long struck me as very imperfectly understood, having regard to the several cavities which display the change and the several valve lesions which give rise to it Any contribution to real knowledge with regard to dilatation of the heart, a disorder often inferred on insufficient grounds and treated, if this be possible, when it does not exist may be welcomed as tending to release the organ from the grasp of quackery and imposture In a series of cases collected from our post-mortem books during seven years I find that dilatation of the ventricles is more frequently recorded than that of the auricles, dilatation of the right side more frequently than dilatation of the left To descend to particulars I find dilatation of both ventricles recorded in 95 instances, of the left without the right in 49, and of the right without the left in 117 As to the auricles, both were mentioned as dilated in 34 instances, the left without the right in 14, and the right without the left in 31 I will take the cavities separately with regard to the causes of their dilatation It may be observed at starting that dilatation of the right ventricle, however frequent in comparison to that of the left, was in most cases slight—due to disease of the respiratory organs rather than of the valves

First as to the *left ventricle* Obstruction to its exit usually causes hypertrophy rather than dilatation, though in some circumstances dilatation is also apparent Aortic stenosis causes great hypertrophy, little or no dilatation Obstruction in the course of the aorta such as is caused by thoracic aneurysm causes some degree of dilatation but not much Renal hypertrophy is well known and has been fully discussed Some of the largest degrees of hypertrophy of the left ventricle are of this nature, the right ventricle sharing in a very minor extent The change is produced by an abnormal resistance which is opposed to the contraction of the ventricle by an obstacle in the course of the blood which leaves it, which obstacle is presumably located in the capillaries With the hypertrophy is more or less dilatation the dilatation being more pronounced in the more rapid forms of the disease, the hypertrophy in the more protracted It is obvious that stretching may be a rapid process while hypertrophy must be a slow one The dilatation of the left ventricle which ensues upon obstruction of its exit, or in other words upon the abnormal retention of blood within the cavity, is greatly exceeded by that which ensues upon the abnormal introduction of blood into it as occurs with aortic regurgitation Here we have blood entering the ventricle abnormally through the aortic valve at the same time that blood is entering the same cavity normally through the mitral valve It is to be observed that the abnormal introduction of blood in diastole is a far more potent cause of dilatation than the abnormal retention of it in systole This is an important consideration in the understanding of dilatation Dilatation, like hypertrophy, is the result of pressure within the cavity which is dilated The pressure is more effective in producing dilatation when it is applied during expansion than during contraction It is obvious that during the tension of muscular contraction—in other words, during systole, there is more resistance to stretching than during the relaxation of diastole Hence the extravagant expansion of the ventricle which occurs with aortic regurgitation notwithstanding that the walls are reinforced by hypertrophy Why should this hypertrophy occur with simple aortic regurgitation in which there is no obstruction ahead? The cause is clear The blood which falls back into the ventricle has to be again driven out. The work of the heart is increased by a sort of labour of Sisyphus It has at each contraction an abnormal quantity of blood to expel with necessarily increased pressure on its walls in systole

Next comes another cause of dilatation of the same cavity in which the same principle is to be recognised as that which causes dilatation under aortic regurgitation. It is a matter of common observation that in connexion with regurgitation through the *mitral* valve the left ventricle is considerably dilated and somewhat hypertrophied How comes this? Should we not expect the contrary? If hypertrophy and dilatation are caused by intra ventricular pressure how is it that these ensue when intra ventricular pressure is abnormally reduced? For so it must be, at least during systole, by a leak which discharges as the ventricle contracts The key to the mystery is obviously this though the intra ventricular pressure is reduced during systole it is increased during diastole All the blood which is sent the wrong way through the mitral valve during systole has to come back again during diastole so that the discharge from auricle to ventricle is increased by exactly the amount which has wrongfully passed from ventricle to auricle The increased quantity of blood which enters the ventricle in diastole must necessarily produce increased pressure at this period though the reverse condition holds during systole.

So much for the dilatation of the left ventricle which depends on defects in the valvular machinery Kidney disease as a cause of dilatation, with or without hypertrophy, is about as frequent as valve disease, upon this I need not dwell at present These two conditions account for the great majority of cases But there remains a minority, chiefly due to deterioration of the muscular substance Diminution of resistance may, as far as dilatation is concerned, produce much the same result as increase of pressure Among the causes of parietal weakening must be mentioned fatty and fibroid degeneration which are fully recognised in this relation, and there must also be mentioned many conditions of protracted or exhausting illness by which the ventricle, in common with other muscles, is impaired and weakened. Typhoid fever, diphtheria and diphtheritic paralysis, perforating ulcer with hæmorrhage, and cancer of the stomach are all represented in the series of cases from which I have chiefly drawn up this account In several cases alcoholism takes a place as an antecedent

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Lastly, many constitutional causes, or causes acting on the system at large, are productive of cardiac dilatation, which condition may be spoken of without reference to particular cavities, though it chiefly concerns the ventricles Among these constitutional causes are such as affect the general nutrition, among which may be mentioned simple ulcer of the stomach particularly when associated with loss of blood, carcinoma of the same organ, anæmia (pernicious or of other kinds), diabetes, and possibly alcoholism In the series of cases I have spoken of drink occasionally presents itself as the antecedent of the dilatation, but it is to be doubted whether this is more than an accidental occurrence Putting this question aside it is sufficiently evident that anæmia and exhaustion are efficient causes of cardiac dilatation though only of the minor degrees of it It is to be presumed that the heart shares in the general debility and the muscle stretches from want of tone

To touch in retrospect upon the salient points connected with cardiac dilatation and hypertrophy, they are these An obstacle presented to the contraction of any of the chambers of the heart is followed by hypertrophy and dilatation in different proportions The thicker walls are more liable to hypertrophy, the thinner to dilatation The ventricles are more liable to hypertrophy than the auricles, the left ventricle more than the right Dilatation follows the reverse rule and is more prone to affect the auricles than the ventricles, the right ventricle more than the left Hypertrophy of the left ventricle, often with little or no dilatation, ensues whether the impediment is conspicuously placed at the aortic exit or is remotely placed in the capillaries and is a matter of inference rather than of observation. When hindrance is opposed to the contraction of the *right* ventricle, which is usually by obstruction in the lungs, dilatation preponderates, though hypertrophy is more or less apparent. Much dilatation, often combined with considerable hypertrophy, often affects the left auricle as the result of obstruction at the mitral orifice as the result of stenosis All these causes of hypertrophy and dilatation act by increasing the intra-cardiac pressure during the process of contraction. But there is another process which I particularly wish to insist upon which is especially productive of dilatation—that is, increase of intra cardiac pressure during relaxation or diastole Pressure exerted at this time, while the walls are in the act of expansion and the muscle presents a minimum of resistance, would seem to be well suited to cause stretching and it is a matter of observation that what might be expected actually occurs. A striking example of this is afforded by the dilatation of the left ventricle under aortic regurgitation, the dilating force being brought to bear while the chamber is expanding With the dilatation occurs also hypertrophy All the blood which has fallen back into the ventricle has to be re-expelled so that the systolic labour of the ventricle is increased in proportion to the amount of regurgitation Another instance of dilatation produced by intrusion in diastole has been sufficiently dwelt upon in connexion with mitral regurgitation, the blood driven back into the auricle during the ventricular systole being returned into the ventricle during its diastole to its distension and dilatation.

In conclusion, both dilatation and hypertrophy are brought about by intra cardiac pressure which is either absolutely increased or is greater than the means of resistance Commonly these two results are associated, though the proportions vary Hypertrophy is apt to prevail when there is undue retention of blood during systole, dilatation when there is undue intrusion of blood during diastole Hypertrophy is the more apparent when the exit of blood is impeded, dilatation when the entrance of blood is increased. The one affects the heart in systole the other in diastole The origin of dilatation in distension during diastole though not the only mode of its production perhaps may be regarded as the chief and as one to which attention needs to be emphatically called

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ISOLATION HOSPITAL FOR GLAMORGANSHIRE — At a meeting of the Llandaff and Dinas Powis Rural District Council held on May 30th the clerk reported that the Glamorganshire County Council had written stating that unless the district council showed something definite with regard to the proposed isolation hospital a compulsory order would be issued After some discussion the matter was referred to the committee

ABSTRACT OF AN

Oration on Medicine

A CENTURY OF MEDICINE IN AMERICA[1]

Delivered at the Fiftieth Meeting of the American Medical Association, Columbus, Ohio, on June 7th, 1899,

BY J C WILSON, M D,
OF PHILADELPHIA.

THE most wonderful century of the world's history draws to a close Has medicine, that branch of human endeavour in which we are especially interested, kept progress with the times? Has the century done for it what it has done for other things? The question is not hard to answer For medicine the changes of this year-hundred have been awakening from the sleep of ages The work of the early anatomists, the great discovery of Harvey, Auenbrugger's laborious revelation, Jenner's patient investigation, were stirrings in the slumber The dawn of the century was auspicious Vaccination was widely practised and its value was everywhere recognised Corvisart rescued the Inventum Novum from oblivion Laennec invented the stethoscope and discovered auscultation The methods were practically complete, but it took 40 years and the influence of Skoda to make physical diagnosis a familiar art The era of speculative medicine was fast drawing to a close Fads and "isms" arose, as they will arise from time to time among the half educated and the degenerate, but their influence has been with few exceptions shortlived and their reaction upon scientific medicine favourable. The microscope ceased to be a scientific toy and became an instrument of precision. New sciences ranged themselves as the handmaids of medicine In 1858 Virchow issued the "Cellular Pathology as Based upon Physiological and Pathological Histology" It was but a step onward to experimental physiology, physiologic chemistry, and experimental therapeutics In truth the "close and severe" methods had come and had come to stay It was evident that these methods and these only could be successfully used in the search for truth. The fairy tales of science had become the everyday handbook of the medical man We had fully entered upon the era of experimental medicine Ether and chloroform anæsthesia for operative purposes robbed surgery of half its terrors and rendered possible operations previously impracticable The germ theory of disease came into prominence as a working hypothesis Lister made the astounding discovery of surgical cleanliness, and early in the last quarter of the century the new surgery replaced the old Marvellous changes! Anæsthesia had robbed surgery of half its terrors, an almost perfect antiseptic technic has taken away the rest In fact, there are those chiefly among the gentler sex, for whom surgery appears to have no terrors whatever

[Dr Wilson then pointed out that clinical medicine did not progress so fast as other divisions of the subject until bacteriology came into being. Therapeutical science had been greatly improved, but the great gain lay in the field of preventive medicine. Dr Wilson continued]

The aim of modern medicine and the object of modern therapeutics is not so much to cure disease as to prevent it The human mind is now chiefly concerned in the study of origins In every department of research whether the natural sciences, criticism, history even theology, the same method of inquiry is pursued In the words of Allbutt the analytical method "is leading to a revolution in our conception of therapeutics as of all these other studies a revolution which as yet we have not fully understood. This revolutionary conception is that death is not to be driven away by the apothecary, not by any cunning compilation of drugs, but is to be prevented by the subtle strategy which consists in knowing all the moves of the game." And he predicts that "the medicine of the future will consist in setting our wits to nature, in recognising that when evils

[1] We wish to acknowledge the courtesy of the editor of the *Philadelphia Medical Journal* who has given us the opportunity of publishing this address.

of dilatation, if the association be more than accidental it must be attributed to deterioration of the muscular fibre produced by the drink

Dilatation of the *left auricle* may be conveniently considered in juxtaposition to that of the ventricle The cause of dilatation of the left auricle is generally disease of the mitral valve which may be either obstructive or regurgitant The dilatation is most remarkable with stenosis, the extreme narrowing of the auricular exit which sometimes exists opposing resistance to the emptying of the cavity and occasioning repletion, dilatation, and hypertrophy The abnormal pressure within the cavity, be it observed, is during its contraction, and hypertrophy of the muscular tissue together with dilatation is a conspicuous result Mitral regurgitation acts differently, the pressure is here brought to bear within the auricle during its expansion with the result of great dilatation and comparatively little hypertrophy

To pass now to the right side, the *right ventricle* is dilated with greater frequency than the left but usually to a less degree Disease of the valves, the chief source of the greater degrees of dilatation, prevails less on the right side than on the left Dilatation of the right ventricle is due in an overwhelming majority of instances to obstruction of the pulmonary circulation by diseases proper to the respiratory organs I find that in 86 cases in which the only noticeable dilatation was of the right ventricle this was attributed in 62 to obstruction in the lungs or air passages This number included instances of phthisis, emphysema, bronchiectasis, pneumonia, broncho pneumonia, bronchitis, empyema, pleurisy, diphtheria, and other forms of laryngeal and tracheal obstruction In one instance it was attributed to tetanus In all these cases the dilatation was slight The greater degrees of it were caused by disease of the valves mostly of the left side of the heart and of the mitral valve more often than of the aortic Mitral regurgitation and mitral obstruction are both frequent in this relation, regurgitation with a slight preponderance To look for a moment at the action of mitral regurgitation in dilating the right ventricle it is obvious that the regurgitant current overloads the left auricle and the pulmonary veins during the ventricular systole simultaneously with the normal discharge from the right ventricle into the pulmonary artery The two currents conflict, the emptying of the right ventricle is hindered, and dilatation ensues by abnormal pressure within this cavity during systole With regard to mitral stenosis the same result is in the end produced The left auricle, unable to empty itself, remains permanently occupied and thus opposes a difficulty to the relief of the pulmonary veins and of the right ventricle Aortic regurgitation is also a recognisable cause of dilatation of the right ventricle The way in which it acts is clear The repletion of the left ventricle in diastole hinders the discharge by the pulmonary veins, impedes the current in the pulmonary artery, and so places difficulty in the way of the closure of the right ventricle Disease of the right valves is insignificant as a cause of change in the right ventricle in comparison with disease of the left valves Tricuspid regurgitation is recognisable, though infrequently, as a cause of dilatation of this cavity It acts, as does mitral regurgitation upon the left ventricle, by creating repletion during diastole Dilatation of the right auricle frequently accompanies that of the right ventricle and may be due to any condition which impedes the emptying of that cavity These conditions I need not recapitulate The varieties of pulmonary obstruction, particularly if chronic, and disease of the left valves, especially of the mitral, are the most frequent causes Mitral stenosis gives rise to great dilatation of both auricles, the left is often hypertrophied as well, with the right dilatation is more prominent The *modus operandi* of the latter change is obviously the loading of the pulmonary circulation and the consequent difficulty in the discharge of the right cavities

So much for dilatation of each cavity taken separately There are many states in which both ventricles or all the four chambers are together affected Multiple or general dilatation often depends on complicated valve disease, sometimes on disease limited to one valve, more especially if that valve present a double imperfection, and sometimes on an apparently simple lesion, such as that which occasions mitral regurgitation When the valve lesions are multiplex it is easy to understand from what has been already put forth that the dilatation may be multiplex also, In the case of simple mitral regurgitation it is equally easy to see how this may affect several of, or all of, the cavities The mitral reflux necessarily dilates the left auricle The reflux in returning dilates the left ventricle The repletion of the left auricle opposes the discharge from the right ventricle with consequent dilatation of the right side

Mitral stenosis in theory should be attended with the opposite state of the left ventricle to that which attends mitral regurgitation With the lessened admission of blood the cavity should shrink upon its diminished contents and become atrophied with the diminished blood pressure within it In rare instances this is so, but these are exceptions rather than the rule Mitral stenosis is almost invariably attended with regurgitation and the consequent changes are thus complicated Beside lesions of valves general dilatation, or dilatation affecting both sides of the heart, may be produced by aneurysm of the arch of the aorta, more rarely by pericardial adhesions and commonly by many conditions of pulmonary obstruction With regard to aneurysm it is recognised that the disease *per se* has little effect in causing cardiac hypertrophy, though often associated with other causes to which it is due, but the cases to which I have appealed show that dilatation sometimes presents itself with aneurysm apparently as its consequence, and that the dilatation may affect both ventricles It is to be suggested that the dilatation of the left ventricle is first produced by the aortic obstruction and that mitral incompetence follows though the valve segments are healthy, and subsequently the changes in the right side which mitral regurgitation produces It is not easy to isolate the action of pericarditis as a cause of cardiac dilatation or hypertrophy since pericardial inflammation is so constantly associated with valvular inflammation that we may doubt how much to attribute to each With pericardial adhesions it is obvious that resistance is opposed to the movement of the walls and increased work imposed which may lead to hypertrophy

From the cases which I have collected it seems clear that dilatation of both sides of the heart, often together with hypertrophy, is concurrent with many conditions of respiratory embarrassment, among which may be mentioned bronchitis and broncho-pneumonia, emphysema, diphtheria, and diphtheritic paralysis It is obvious that such conditions obstruct the pulmonary circulation, hinder the discharge from the right ventricle, and thus cause its dilatation, but how do they affect the left ventricle? The facts suggest that engorgement of the right side of the heart acts backwards by retarding the venous circulation, produces stagnation in the systemic capillaries, then of the systemic arteries, and eventually tells upon the left ventricle I could adduce a case in which enormous dilatation and hypertrophy of both ventricles, the heart weighing 32 ounces, presented no other obvious cause than fibrosis of the lung together with bronchiectasis I cannot but think it probable that in this case the fibrosis was more general than is represented and the cardiac hypertrophy not simply due to the state of the lung

Hitherto I have been considering causes of dilatation of which the mechanical origin is obvious in valvular imperfection, or such as depend on obstructions in the pulmonary circulation which, though less obvious, are scarcely less evident I now proceed to others which depend on inferential obstructions, on changes in the tissue of the heart itself, or on constitutional conditions The most frequent of all these is renal disease I need not revert to the frequency of hypertrophy and dilatation of the left ventricle from this cause, but may add that in most cases the right ventricle is also involved, though to a much less extent As between hypertrophy and dilatation though hypertrophy generally with some attendant dilatation is far more common with renal disease than dilatation alone, yet dilatation is sometimes conspicuous particularly with the less protracted forms such as result in the large white kidney of nephritis and the contracted white kidney of the same origin

Dilatation of one or both ventricles with or without the participation of the auricles is sometimes due to fatty or fibroid changes in the walls, but these causes are numerically insignificant as compared with other cardiac and constitutional states Of 259 cases of ventricular dilatation I found only nine where obvious muscular change without valve-lesions was recognised as giving rise to it, though it is of course likely that muscular changes may have been present in some cases where they escaped notice

organiser this association has had abundant proof, and Pepper—a life of matchless energy and devotion to the widest human interests, whose rare gifts as a physician and abilities as a teacher, whose civic pride and high patriotism, will place him, when the dispassionate history of our times come to be written, among the great Americans and in the foremost rank of the citizens of that Commonwealth which reverently claims Franklin and Rush as her own

It is not wholly to the ease with which knowledge is spread nor to the great men of the profession that we owe the advanced position of medicine in America to-day Important as each of those factors is, it may well be questioned whether their combined influence could have impressed upon the art of medicine that peculiarity in which the profession of our country stands pre-eminent and which is at once of the greatest practical value and of the richest promise for the future That peculiarity is the prevalence of high ideals All kinds of men engage in the pursuit of medicine from all kinds of motives But to the necessity of a livelihood and to personal ambition the American medical man adds, and very often in the absence of those he cherishes, a sort of chivalric devotion to some principle allied to his calling but only indirectly bearing upon his everyday affairs It may be a collateral science, or preventive medicine, or schemes for the welfare of the poor, or *belles lettres*, or medical libraries, or for himself a broader knowledge and a keener art, or toward his fellow man a greater gift of usefulness Such thoughts are solace in his toil and recreation in his hours of leisure, with widening opportunities and high examples he must have something more than his everyday work. Without some cherished ideal he cannot be content This wholesome mental restlessness is peculiarly American. It comes of our physical restlessness We lack repose because we abound in energy Contentment means conservatism and conservatism points in the direction of stagnation When we speak of stagnation we think of loneliness, of isolation The tendency which distinguishes American medicine is essentially opposed to isolation, to individualism It exerts itself in the direction of a higher, more complete, and more specialised organisation of the profession It is this tendency which has made the general fount of knowledge accessible to all members of the profession who care to share in it—which has given to the independent worker, in whatever department, an uplifting sense of companionship, of community of interest, of sympathy in a common cause It is this which has brought into the life of the toiling practitioner in the monotony of his everyday duties and cares a saving consciousness of personal dignity and power

To the physicians of Northern New Jersey must be ascribed the credit of having made the earliest attempt to promote the interests of the profession by means of organisation In the year 1766 a meeting was held at New Brunswick attended by delegates from all parts of the State and a permanent organisation effected. The objects of the association as set forth in the preamble to the constitution were "mutual improvement, the advancement of the profession, the promotion of the public good, and the cultivation of harmony and friendship among the members" This society held regular meetings twice a year until the breaking out of the war In 1781 the Massachusetts Medical Society was incorporated Towards the close of 1786 the College of Physicians of Philadelphia was instituted Other similar organisations followed from time to time until that memorable meeting of May 7th 1847, at which, by the election of Nathaniel Chapman as President, Jonathan Knight Alexander H Stevens, James Moultrie and A. H Buchanan, Vice-Presidents, Alfred Stillé and J H W Dunbar secretaries, and Isaac Hays, treasurer, was finally carried into effect the organisation of the American Medical Association

[After a few remarks upon the importance of such an organisation Dr Wilson proceeded]

In general as regards the requirements for a degree the American Medical Association should, in my opinion, exert an influence to secure uniformity in the requirements for admission a systematic graded course with uniform tests at the end of each year, and uniform requirements for graduation With reference to written examinations the question of the honour system should be persistently agitated If that system can be carried out at many of the colleges, at West Point and Annapolis and at the University of Virginia why not in all our medical schools? Its general adoption would go far in determining a high standard of personal and professional honour It should exert its influence also to secure general uniformity in the examinations for the licence to practise among the States and a general reciprocity among those boards by which the licences may be transferred It should strongly exert its influence in the direction or the regulation of the specialties and the requirement of evidence of clinical experience in general medicine as pre-requisite to the practice of them It should exert its influence in the matter of expert testimony in courts of justice This subject is a growing scandal A change or practice is urgently necessary both in the interest of justice and that of the medical profession It should exert its influence to secure such legal enactments in the several States as will protect the people from the various forms of unorganised and organised quackery and to the end that no licence to practise medicine in any of the branches shall be granted to any applicant until such applicant has successfully passed an examination in anatomy, physiology, pathology surgery, midwifery, and the diagnosis of diseases, and that a stringent penalty shall be enforced against all persons who seek to practise upon the sick, injured, or deformed, by any means or upon any pretext whatever except in the case of accident or emergency, and then only for the purpose of immediate relief and assistance. It should exert its influence to build up in the secular and religious press of the country a proper sense of responsibility in regard to lewd, indecent, and criminal advertisements thinly disguised as medical and against the appearance in such publications and in certain so-called medical journals of advertisements of nostrums and cure-alls It should exert its influence to secure such legislation as will obtain uniform divorce laws for the whole country and do away with the legal enormity of a man and woman being legally married in any State and living in adultery so soon as they have crossed its borders The question is primarily one of morals, but it is also one of health It should exert its influence strongly in favour of proper rearrangement of the status of military and naval medical officers to the end that the efficiency of those branches of the public service may be increased and the recompense and the rank of the medical officers properly adjusted It should exert its influence to secure the dual appointment of surgeons and physicians to regiments and posts, since the work of the two is complementary and cannot in the present state of the art of medicine be properly performed in all its details by any one man, especially in active service, also to secure the establishment of clinical laboratories in connexion with the military hospitals in the tropical stations with the detail of medical officers especially fitted by training and experience for the investigation of tropical diseases and conditions It should exert its influence to secure a national quarantine service with full jurisdiction over the seaboards and the lake borders and over internal regions affected with general epidemics or endemic conditions not amenable to the control of the local authorities It should exert its influence to secure the appointment of a secretaryship of Public Medicine, the portfolio of which should be assigned to a medical man, to the end that the President may be promptly and authoritatively advised concerning technical questions of vital importance to the welfare of the nation

To many of you these suggestions seem utopian and impracticable Not so If we earnestly desire them they will come to pass Their fulfilment rests with you and in your hands is the power of an organised profession

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CHELSEA CLINICAL SOCIETY — The second annual dinner of this young society was held at the Criterion Restaurant on June 3rd, the President, Mr J Foster Palmer being in the chair A numerous company of members and their friends attended and a most enjoyable evening was spent After the several loyal toasts the President proposed the toast of "The Chelsea Clinical Society" He gave a short *resume* of the work done by the society during the past year, referring more especially to the debate on Tuberculosis a report of which appeared in our columns Dr O C Gibbes replied The toast of "Kindred Societies was also proposed by the President (in the absence of Dr O J Harrison) and Dr Lambard Owen replied calling attention to the advantages derived from medical societies in promoting unanimity amongst professional men The usual toasts of "The Visitors," "The President" (proposed by Dr W Ewart), and "The Officers of the Society" followed and the social qualities of the meeting were enhanced by music and recitations.

have befallen us there is no counsel, and that in the simple beginnings of things are the time and place to detect where stealthy nature, atom by atom, builds and unbuilds, feeds us or poisons us" Modern medicine is no longer content with trying to make some salvage out of the wreckage of disease, but is earnestly seeking for measures by which the storm can be avoided, the channels deepened, and the rocks upon which high hopes are wrecked beaconed

All that is best in the older medicine is to be found in the new, but the new is something essentially different The old was an art based upon empiricism, relying largely upon so called specifics and not altogether scornful of charms and magic The new is an art based upon a group of correlated sciences and deriving its power from the forces of nature But the new is the outcome of the old, for the empiric method is the gateway to science and the accumulation of facts necessarily precedes generalisations in regard to them

It is of interest to note the position of the United States in regard to modern medicine It is no long time since our people were pushing westward over the wilderness and a famous poet and story writer has accused us of being some centuries behind Europe in learning and manners Railroads and the telegraph are great civilisers, and the Postal Union a wonderful teacher There is no wilderness now except that beyond the seas and "a few centuries" is a figure of speech In medicine the world's knowledge is ours The latest work of investigators in every field of research and in every country is quickly before us and we give something in return Laveran discovered for us the malarial parasite and Marchiafava, Golgi, and others of the Italian school elaborated his observations, but an American, the late Professor J K Mitchell, had anticipated the discovery, being "the first to approach in a scientific spirit the nature of infective disease and particularly in malarial fever," and Laveran's observations were early confirmed on this side the Atlantic by Councilman, Osler, Thayer, and others Roux and Behring gave to the world the treatment of diphtheria by antitoxin serum but the uncertainties concerning its efficacy were settled by Welch's analysis of the statistics and the two collective investigations of the American Pediatric Society, Ernest Brand devised the method of treating enteric fever by systematic cold bathing and showed that by it the mortality is cut in half, but it remained for American practitioners to demonstrate that the plan is not only feasible in hospitals, but also in private practice Macewen and Horsley showed that cerebral tumours could not only be definitely localised, but also that they could be successfully removed, but cranial surgery was carried to its full development and a perfect technic laid down by Keen Here and there we have given more than we have received We recall the contributions to neurology and especially the successful treatment of neurasthenia and hysteria by Mitchell, the second in the line of an illustrious medical family, and speak of intubation in grateful memory of the gentle O Dwyer, and in surgery we are reminded that the New World has given something to the Old by the work of Senn, Murphy, Richardson, McBurney, my colleague Deaver, and by that in earlier times of the clear minded Grosses father and son, the Brothers Atlee, and the heroic McDowell The instances of accord, response, co-endeavour between the workers in medicine on the opposite shores of the Atlantic could be indefinitely multiplied

In the field of literature the conditions are the same On the one hand the great weeklies of Berlin and Munich, THE LANCET, and the *British Medical Journal*, on the other hand the journals of Boston and New York, the *Philadelphia Medical Journal* and the *Journal of the American Medical Association* It is impossible to speak here of individual monographs and treatises But against such store-houses of medical lore as Ziemssen's Encyclopedia and Nothnagel in Germany, and Allbutt's System in England, may we not set Pepper's System and that of Loomis and the Twentieth Century Practice? It is an exchange of courtesies, of products It is a well balanced reciprocity

If America is a little behind in original research she is very alert in the application of that which is serviceable If her investigators are less laborious and less numerous her practitioners excel in adaptability, tact, and skill Meetings of national societies such as this and the national and international congresses are a strong force in the process of unification One of the finest things in the medicine of our day is its solidarity In the institutions where medicine is taught and in the organisation of the instruction we are making hopeful advancement Much remains to be done, but the defects are chiefly in the direction of want of uniformity of requirement and of full coöperation among the several States and are in a fair way of correction An open handed philanthropy has scattered among the great centres of population from the Atlantic seaboard to the Pacific slope commodious, well appointed, fully equipped hospitals, not at all inferior to the great hospitals of the Old World Their foundations are less ancient, as must be in a young country, but their spirit is more plastic Traditions are fine but they sometimes fetter thought To the noble-hearted non medical managers of these institutions it is clearer than ever before that while the care of the sick poor is the primary object it is by no means the whole object of a modern hospital The instruction of the student, the training of the medical man, clinical and pathologic research, the accumulation of facts for immediate or future use in scientific medicine are secondary functions of essential importance So it has come to pass that to the non medical mind, as it has long been to the medical, the necessity of the set of laboratories, pathologic, bacteriologic, clinical, is paramount The correlative fact that the number of the staff must be much greater in proportion to the number of the patients than formerly has also become apparent So that by a process of evolution hospitals are taking a much larger part in the education of the medical man than ever before, even those in which a very conservative management is hostile to clinical instruction

It is clear then not only that medicine has kept pace with the progress of the times, nay, more, that it has made advances even more wonderful than many other departments of thought, but also that in America the position of the profession compares favourably with that of any other country Medicine with us is to-day one with the medicine of the world Yet it is little more than 100 years since the country was without a medical profession in the sense in which the term is now used and was then used in the Old World This is not the time nor the place to rehearse the history of medicine in the colonies The subject is set forth in great detail in the writings of Beck, Clark, Bigelow, Ruschenberger, N S Davis, and Billings

[Dr Wilson here mentioned how the first enactment regulating the practice of medicine in the American colonies was passed in New York in 1760 The medical faculty of Philadelphia was established after the revolutionary war in 1788, although the Medical School had commenced in 1765 Dr Wilson continued]

It must be admitted that the rapid strides with which the medicine of the younger country has overtaken and is now keeping pace with the medicine of the world were largely due to the facilities of intercommunication that constitute one of the peculiarities of modern life. Knowledge travels far and fast It has the wings of the light, It must be also conceded that such progress has been aided and accentuated in a remarkable manner by the master spirits who, from time to time appearing upon the scene, seem to be charged with an especial mission and whose presence marks eras in the course of human events Easily and by far the greatest of these, *primus inter pares*, is Rush Others among his contemporaries I have already referred to Nor do I intend to enumerate a complete list Permit me to name one here and there, sometimes a group, as fine examples of medical men who, to say the least, are not commonplace It is easy for one who has read our medical history to recall John Morgan, Redman, Hosack, Drake (who wrote the "Diseases of the Mississippi Valley"), or that coterie of Louis' pupils, including Shattuck, Oliver Wendell Holmes, and Gerhard, who brought back from France physical diagnosis, the distinctions among the fevers, and reasonable methods of clinical work, Jackson and Morton, and the controversies concerning ether, the group of men who, representing others it is true, really effected the organisation of the American Medical Association, whose officers were Knight, Bell Delafield, Arnold, and Stillé Jones of New Orleans is to be mentioned among those whose writings have powerfully influenced the trend of medical thought in the United States, and Flint and Otis and Woodward, to whose industry and ability we owe the "Medical and Surgical History of the War of the Rebellion", and Billings and Fletcher who have given to the medical world the "Index Catalogue of the Library of the Surgeon General's Office of the United States Army" and that unique and most useful of current medical publications, the "Index Medicus" I mention with that emotion with which we speak of a companion newly passed away John B Hamilton, of whose skill as an

EXPERIMENT IV.—*Warm Bath, 15 Minutes, Temperature 38° C.*

—	Pulse-rate.	Arterial pressure mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	60	190	135	17
After ..	60	180	130	15

EXPERIMENT V.—*Sitz Bath, Running, 10 Minutes at 37° C., Cooled at Finish to 30° C.*

—	Pulse-rate	Arterial pressure mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean	
Before ..	66	160	125	17
After	64	135	85	12

In each of these three experiments there is a fall in arterial pressure and a fall in venous pressure, the variation in pulse rate remaining practically constant. If we contrast the percentage fall of arterial pressure with the percentage fall of venous pressure we find that in the first two cases the fall in venous pressure is in greater proportion than the fall in arterial pressure. A diminished output of the heart would tend to lead to a rise in venous pressure; therefore, as we know that heat produces local vascular dilatation these results are best explained as due in the first place to peripheral dilatation of the arterioles, and secondly to increased capacity of the vascular system resulting from that dilatation. It should be stated with regard to Experiment V that before the bath the subject felt somewhat chilly, hence his arterial pressure was considerably above his normal and the fall that occurred was greater than would otherwise have been the case.

Heat in the form of hot dry air, applied generally, has a similar effect in lowering the maximum and mean arterial pressures, but it relatively raises the venous pressure. Not infrequently an absolute rise of venous pressure takes place, though in our experiments the relative rise was more commonly observed (Experiment VI.)

EXPERIMENT VI.—*Turkish Bath, General Dry Heat.*

—	Pulse-rate	Arterial pressure mm. Hg.		Venous pressure mm. Hg.
		Maximum.	Mean.	
Before ..	70	200	135	25
After seven min. in hottest room at 99° C.	120	155	100	20
In cooling room after shampooing	74	170	115	20
Before	64	170	120	20
After 20 min. in second room at 77° C.	110	140	85	17
In cooling room after shampooing ..	70	165	110	20

Here the fall in arterial pressure after exposure to high temperature is considerable, while the fall in venous pressure is insignificant. These changes are accompanied by a marked increase in the pulse rate which is nearly doubled. In the light of Stewart's[3] researches on the output of the heart the diminished output that accompanies a great increase in the frequency of the pulse may share in the production of the lowered arterial pressure, for he finds that 'in general when the pulse rate increases considerably the output per heart beat diminishes while the output per second may or may not alter, but is usually diminished too although not in the same proportion as the output per beat.' Arteriolar relaxation also takes place and both factors act in the same direction and combine to lower the arterial pressure. During the cooling process the arterial pressure rises somewhat, but the net result is a fall, while the venous pressure in the one case remains the same and in the other is slightly raised. The rate of heart beat has nearly returned to its original frequency.

Experiment VII shows the effect of general moist heat with subsequent needle bath.

EXPERIMENT VII.—*Russian Bath, General Moist Heat; 15 Minutes at 41° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	64	155	107	20
After bath and after needle douche two minutes, cooled to 21° C ..	60	150	102	17
Before ..	72	175	130	25
After bath and after needle douche, cooled to 30° C ..	70	160	115	25

The needle douche administered after the bath was taken by the first of these two subjects at a lower temperature (21° C.) than by the second (30° C.), the resulting fall in arterial pressure is therefore less in the former case than in the latter, for the lowering of pressure by the moist heat is partially, though not entirely, abolished by the raising tendency of the cold and percussion.

Effect of percussion.—Experiments I. and IV. show the effect of cold and warm immersion baths in raising and lowering respectively the arterial pressure. Experiment II. shows the effect of percussion added to that of cold and thereby greatly increasing the rise obtained. To ascertain further the effect of percussion a warm needle bath at 38° C. was given with the object of seeing whether the raising effect of percussion would overshadow the lowering effect of the temperature. This was found to be the case, the result being a slight rise in arterial pressure (Experiment VIII.) Contrary to what happened in Experiment I., the venous pressure rose, which tends to show that the peripheral resistance was not increased and that therefore the rise in arterial pressure could not be attributed to this cause. Probably, as in the case of the cold needle bath, percussion leads to an increased output of the heart and this, acting with a diminished peripheral resistance due to the heat, would explain the rise observed in venous pressure. 10 minutes after the bath the mean pressure fell to 105 mm. Hg. in consequence of the subject having been wrapped in a warm towel.

EXPERIMENT VIII.—*Warm Needle at 38° C., Three Minutes.*

—	Pulse-rate.	Arterial pressure mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	72	140	115	15
After	72	145	120	20

Heat and cold alternating.—In the alternating needle bath or Scotch douche, where the temperature is made to rapidly oscillate between warm and cold the net result is a rise in arterial pressure with a slight fall in venous pressure (Experiment IX.)

EXPERIMENT IX.—*Alternating Needle Bath, Six Minutes. Temperature from 37° to 27° C.*

—	Pulse-rate.	Arterial pressure mm. Hg.		Venous pressure mm. Hg.
		Maximum.	Mean.	
Before	60	175	130	25
After	66	190	145	22

[3] Loc. cit.

THE EFFECT OF BATHS, MASSAGE, AND EXERCISE ON THE BLOOD-PRESSURE

BY WILFRID EDGECOMBE, M D LOND, F R C S ENG,
AND
WILLIAM BAIN, M D DURH, M R C P LOND

Mode of observation—The recent appearance of new instruments for the determination of blood pressure in the human subject has enabled us to make the following series of observations on the effects of baths, massage, and exercise on the arterial and venous blood pressure The hæmadynamometer of Oliver and the pulse-pressure manometer of Hill were carefully compared and found to read alike, but as the former instrument proved to be rather easier of manipulation and possesses a much wider scale it was used throughout Both maximum and mean arterial pressures were recorded and the venous pressure was taken according to the method described by Oliver [1] For arterial pressure the radial artery was employed, the subjects being in the recumbent posture except where otherwise stated, with the arm extended on a level with the heart For venous pressure the veins on the dorsum of the hand or wrist were taken in some subjects, in others those of the forearm, with the same precautions to eliminate the effect of gravity 10 subjects in all were experimented upon, their ages ranging from 20 years to 60 years They included marked examples of both low and high pressure Most of the results were confirmed by repeated observation In the few instances in which this was not done confirmation did not appear to be necessary

General considerations—At the outset, before proceeding to discuss the results, it is perhaps expedient to refer briefly to the factors which govern the production and maintenance of blood pressure and to point out how far they can be estimated by the instrument used The chief factors concerned are the output of the heart, the extensibility and elasticity of the arterial walls, and the peripheral resistance None of these can be directly measured by the instrument The maximum arterial pressure, as measured by the instrument, being that force which just prevents the passage of blood along the artery, is a force equal to the sum of the true maximum arterial pressure and the forces requisite to produce distortion of the tissues and artery The latter factors we are unable to measure, though they probably remain constant for each individual during any short series of observations The mean arterial pressure is taken as the mean pressure recorded by the instrument when the indicator gives its maximum excursion The difference between the maximum and mean arterial pressures as thus recorded can serve as an indication of the force with which the blood is discharged if we suppose the rate of discharge to remain the same during the time occupied by the observation When the rate of working of the heart varies during the period of observation the indication is less reliable

The two variable factors determining changes in the mean arterial pressure during any short series of observations are the output of the heart and the degree of constriction of the peripheral arterioles, consequently a fall in mean arterial pressure may be caused by a dilatation of the peripheral arterioles or by a diminished output of the heart, the latter being due to a slowing of the rate of working or to a diminished output of blood per beat A rise in mean arterial pressure will be due to the same factors working in the opposite direction and a variation in mean pressure can also be caused by variations in opposite directions but to unequal extents of the same two factors

From the measurement of the venous pressure as recorded by the instrument we can to some extent infer the state of the peripheral resistance, for a constriction or dilatation of the arterioles will be accompanied by a fall or rise respectively of venous pressure, provided the other factors remain constant Hence variations in venous pressure would serve as a measure of the degree of peripheral resistance were the other factors to remain the same

[1] Journal of Physiology vol. xxiii. 1898, Part 3, Proceedings of the Physiological Society

BATHS

Cold—The effect of the cold bath of plain water is to raise the arterial pressures, both maximum and mean, and to lower the venous pressure (see Experiment I) As in this

EXPERIMENT I—*Cold Bath, two Minutes at 13° C*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure mm. Hg
		Maximum.	Mean.	
Before	70	190	130	25
After	72	210	150	10
10 minutes after	70	185	125	25

instance the rise in arterial pressure is accompanied by a fall in venous pressure we should conclude that this is caused by a peripheral constriction The other way the result could be produced—viz, by increased output of the heart—does not seem to be indicated by any variation in the pulse-rate That the conclusion which we draw from this observation is correct is shown by other experiments specially designed to determine the influence of cold applied to the skin The rise in pressure obtained is of brief duration in normal subjects, for when reaction sets in the arterial pressure falls slightly below its original level, presumably from arteriolar dilatation, and the venous pressure rises to its initial height, relatively, therefore, to the arterial pressure it is slightly higher than before the bath

If to cold the effect of percussion be added in the form of a strong needle-douche applied simultaneously to the whole surface of the body the arterial pressure becomes raised to a greater extent than with cold alone Experiment II gives the details of the results obtained, the subject having a low initial blood pressure

EXPERIMENT II—*Strong Needle Bath begun at 37° C and rapidly cooled down to 16° C, Time, two minutes*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure mm. Hg
		Maximum	Mean	
Before	64	115	85	15
After	72	150	115	10

In this case there is a considerable rise in arterial pressure with a small fall in venous pressure and a distinct increase in the pulse rate These changes are best explained by supposing them to be due to a moderate amount of peripheral constriction accompanied by an increase in the output of the heart That we are correct in supposing that the latter factor is at work in this instance is borne out by the results of Stewart's [2] experiments upon the output of the heart He showed that a moderate increase in the pulse-rate usually corresponded to an increase in the output per second, a result which might explain the whole or part of the rise observed in this experiment That peripheral constriction also plays a part in producing this rise is indicated by the result of the preceding experiment and by the fact that a simultaneous fall in venous pressure occurs

Heat—The effect of warm baths of plain water, on the other hand, is to reduce the arterial pressure to an extent roughly proportionate to the increase of temperature (see Experiments III, IV, and V)

EXPERIMENT III—*Hot Bath 10 Minutes, Temperature 43° C*

—	Pulse-rate	Arterial pressure mm. Hg		Venous pressure mm Hg
		Maximum.	Mean.	
Before	62	185	130	20
After	64	170	117	15

[2] Journal of Physiology, vol. xxii., 1897, Part 3, p 172.

arterial pressure, both mean and maximum, provided the abdomen be not massaged too vigorously Deep massage and compression of the abdomen causes an immediate rise in blood pressure by dispersion of blood accumulated in the splanchnic veins into the systemic circulation. The venous pressure we observed to be always relatively, and in some cases actually, raised, the amount of rise appearing to depend to some extent upon the temperature of the room, being greater in a warm atmosphere We failed to observe with dry massage so marked a rise in venous pressure as is noted by Oliver Experiment XV is a typical one selected from several

EXPERIMENT XV —*Dry Massage Heavy Movements, 40 Minutes*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	83	145	95	15
After 30 minutes vigorous massage to limbs and body (abdomen excluded)	83	135	85	17
After 7 minutes deep massage to abdomen	83	160	100	25

Wet massage in the form of the Aix douche in which massage is administered under a warm douche conveyed by a flexible pipe playing between the hands of the masseur causes an increased effect—that of temperature being added to massage We observed here a greater fall in arterial pressure than was obtained with dry massage and coincidently an actual rise of venous pressure, sometimes considerable (Experiment XVI) The subject taking this bath sits in the erect posture, consequently the abdominal massage is but lightly performed.

EXPERIMENT XVI —*Aix Douche, Temperature 38° C*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg
		Maximum.	Mean.	
Before	70	130	135	17
After	64	150	115	25

On the other hand, wet massage in the form of the Vichy douche in which massage is administered under a warm needle spray, the subject being in the recumbent posture, causes a rise in all pressures maximum and mean arterial, and venous (Experiment XVII) The difference between the effect of this bath and of the preceding is no doubt due to, first, the percussion of the needle spray tending to raise the blood pressure (Experiments II and VIII), and, secondly, to the fact that the subject being in the recumbent posture abdominal massage is more efficiently performed and hence a rise in pressure results Personal experience of the two baths bears out this difference a feeling of languor resulting after the Aix douche and of exhilaration after the Vichy douche

EXPERIMENT XVII —*Vichy Douche, Temperature 38° C*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	64	117	85	15
After ..	68	125	95	22

To illustrate the cumulative effect of the Aix douche the following example may be given, from which it will be seen that the progressive result is a considerable lowering of arterial pressure and raising of venous pressure (Experiment XVIII.) The observations were made on a patient suffering from chronic renal disease

EXPERIMENT XVIII —*Series of Aix Douches, Temperature 37–38° C*

—	Pulse-rate	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before (sitting)	100	240	155	15
After four baths (sitting)	96	215	130	25
After 12 baths (sitting)	88	180	110	30

Our observations therefore, are in agreement with the experimental results obtained by Brunton and Tunnicliffe that massage lowers the general blood-pressure, but they are somewhat at variance with the statement of Oliver that a rise in arterial pressure expresses the general drift of the influence of dry massage on the circulation, unless he refers to the initial transitory rise frequently obtained He does not state, however, whether massage of the abdomen was carried out in his experiments, presumably it was, as this is the general course adopted, in which case our observations fall into line with his, for, as has been shown, vigorous abdominal massage will abolish the fall produced by massage of the limbs and rest of the body and cause a rise in arterial pressure, where this is but lightly performed the net result is a fall The influence of warm temperatures plus massage, as in the Aix douche, is to considerably augment this fall. *In all probability the factor primarily and chiefly disturbed* by massage is the peripheral resistance rather than the output of the heart and the result is to be attributed mainly to diminished resistance from arteriolar dilatation

EXERCISE

The effect of exercise on the blood pressure has been examined by many observers with somewhat conflicting results Marey[6] as the result of his experiments found the blood-pressure to be raised during severe muscular exercise, but to be lowered after cessation of exertion Oertel[7] and others found a considerable rise in blood pressure following muscular exercise Lauder Brunton and Tunnicliffe,[8] observing the effects of resistance exercises on the circulation, using the sphygmomanometer of Mosso, found an initial rise in arterial pressure to take place soon after commencement of the exercises During their continuance the blood-pressure fell to its original level and continued falling after cessation of movement, the fall lasting about half an hour afterwards, when it gradually rose to its initial height. They discuss the probable cause of the discrepancy between their results and those of previous observers and refer it to the different amount of exercise taken. In the case of the earlier observers the exercise taken was more severe and sufficient to increase the frequency of pulse and respiration, while in their own experiments with resisted movements the exercise was of a much gentler nature, insufficient to accelerate either pulse or respiration They consider the fall in pressure following the exercises to be due in great part to the dilatation which occurs in the peripheral muscular area. The initial rise in pressure they refer in part to reflex cardiac stimulation and in part to the diminution in calibre of the peripheral muscular arteries which occurs during the shortening of the muscles which are called into play The latter factor they consider the most potent To account for the fall in pressure that occurs while the muscles are still contracting they suggest the possibility of a vaso-dilating substance being produced by the contraction of muscle. Leonard Hill[9] recently has shown that such moderate exercise as rising from the sitting posture, walking a few steps, and again sitting down is sufficient to slightly raise the mean arterial pressure, the pulse-rate being also raised, while severe exercise in the form of a rapid run causes a considerable rise in pressure, the frequency of pulse and respiration being of course, increased The rise thus obtained is of brief duration, the pressure falling to normal within half an hour after exercise and before the pulse-rate has fallen to its initial frequency, subsequently, however,

[6] La Circulation du Sang. Paris, 1881

[7] Handbuch der Allgemeinen Therapie der Kreislaufs-Störungen. Leipzig, 1891.

[8] Brit. Med. Jour., vol. II., 1887

[9] THE LANCET, Jan. 28th, 1893.

Spinal douche—The addition of a spinal douche to the ordinary needle bath did not seem in any way to enhance its effect, a slight rise in all pressures resulting (Experiment X)

EXPERIMENT X—*Needle Bath + Spinal Douche, Six Minutes, Temperature 37°, cooled at finish to 24° C*

—	Pulse-rate	Arterial pressure, mm. Hg		Venous pressure, mm. Hg
		Maximum.	Mean.	
Before	74	165	110	22
After	70	175	117	25

Saline baths—To ascertain the effect of mineral constituents in the water the saline sulphur baths of Harrogate were first experimented with (Experiments XI and XII) Of these, the "natural" sulphur bath, consisting of the pure undiluted water raised to the required temperature by passing on its way to the bath through a heated coil, contains about 3 6 parts per mille of total solids, consisting of the chlorides and carbonates of sodium, calcium, and magnesium, the chlorides being largely in excess Of the chlorides, that of sodium greatly preponderates The sulphur constituent amounts to about 0 03 part per mille of sodium sulphide, with a small volume of sulphuretted hydrogen gas The so-called "strong" sulphur bath, consisting of the pure sulphur water raised to the required temperature by admixture with hot plain water, contains about 2 1 parts per mille total solids, the sulphide amounting to 0 01 part per mille

EXPERIMENT XI—*Natural Sulphur Bath, 20 Minutes, Temperature 37° C*

—	Pulse-rate	Arterial pressure mm. Hg		Venous pressure, mm. Hg
		Maximum.	Mean.	
Before	72	175	125	22
After	68	140	85	20

EXPERIMENT XII—*Strong Sulphur Bath, 15 Minutes, Temperature 37° C*

—	Pulse-rate	Arterial pressure, mm. Hg		Venous pressure, mm. Hg
		Maximum.	Mean.	
Before	70	160	120	22
After	70	150	110	15

The result is a very marked fall in arterial pressure in the case of the natural sulphur bath, with an absolute fall, though relative rise, in venous pressure, the strong sulphur bath also gives a fall in mean pressure with a fall, both absolute and relative, in venous pressure Comparing these with the results of hot and warm plain water baths shown in Experiments III and IV the fall in arterial pressure is seen to be much greater in the case of the saline baths at the same temperatures This water, therefore, would seem to have the effect of enhancing the dilating power of warm temperatures on the peripheral arterioles How far the effect is to be attributed to the salines in the water and how far to the sulphuretted hydrogen as we are unable to say

The artificial *Nauheim baths*, both still and aerated, were next examined The still baths were made by dissolving 3 2 kilos of sodium chloride and 85 grammes of calcium chloride in 136 litres of water, giving a proportion of 23 parts per mille and 0 6 part per mille of the two salts respectively The aerated baths were obtained the arte[illegible] the / wh[illegible] of Sandow's tablets which contain, in addition tively of venous pre[illegible] above, a quantity of sodium bicarbonate constant Hence var[illegible] for the production of effervescence (Expe[illegible] as a measure of the degre[illegible] XIV) The baths were given at other factors to remain the[illegible]ually adopted in their therapeutic

EXPERIMENT XIII—*Still Nauheim Bath, 20 Minutes, Temperature 34° C 3 2 Kilos NaCl and 85 Grammes $CaCl_2$ to 136 Litres of Water*

—	Pulse-rate	Arterial pressure, mm Hg.		Venous pressure mm. Hg
		Maximum.	Mean	
Before	54	190	115	5
After	60	140	95	10
20 minutes after	60	155	110	7

EXPERIMENT XIV—*Aerated Nauheim Bath, 20 Minutes, at 34° C*

—	Pulse-rate	Arterial pressure mm. Hg		Venous pressure mm Hg
		Maximum	Mean.	
Before	88	165	125	12
After	84	140	97	15
30 minutes after	84	145	105	20

takes place, though the temperature employed is 34° C as against 37-38° C in the former experiments The fall is greater than that which occurs with plain water and with the strong sulphur bath, though less than that obtained with the natural sulphur bath This latter example, however, is an extreme case and represents a fall beyond that which usually occurs in this bath On venous pressure the effect is very marked, both cases showing not merely a relative rise but an absolute increase over the original level In the case of the still Nauheim bath the subject of the example given had a high maximum arterial pressure with low venous pressure, probably due to a tightly contracted peripheral circulation which the first bath opened up to some extent. A series of baths has a cumulative effect, for in the subject in question the maximum pressure after six baths on alternate days became reduced from 190 mm Hg to 160 mm Hg before the bath, and the venous pressure was raised from 5 mm Hg to 25 mm Hg Where the factor of effervescence is added the result is still more marked and endures for some time even after a single immersion (Experiment XIV)

Saline sulphur baths having a more potent effect than plain water baths at the same temperature, and Nauheim baths yielding yet more marked results even at lower temperatures, it appears then that if the lowering of arterial pressure and the raising (either relative or absolute) of venous pressure be due mainly to lessened peripheral resistance, as is probably the case, the amount of arteriolar relaxation caused by immersion in warm water becomes progressively greater as the amount of saline material in the water is increased Up to what point of concentration this augmentation continues we have not yet been able to determine

MASSAGE

Lauder Brunton and Tunnicliffe,[4] experimenting on cats and dogs, have demonstrated that massage of a considerable muscular area causes an initial rise in the general blood-pressure which is followed by a considerable fall, amounting in some instances to as much as one fifth of the original pressure G Oliver[5] in a recent series of articles on blood-pressure is "struck by the singularly small and somewhat variable effects produced by massage in the arteries and veins of normal subjects *Local massage*," he says, "does not induce any obvious change in the blood pressure the effect of general massage may be equally negative. I have, however, observed a slight rise in the arterial pressure (mean and maximum) and a doubling of venous pressure, and this observation probably expresses the general drift of the influence of general massage on the circulation in normal subjects" Our observations lead us to the conclusion that general dry massage, in the form known as *pétrissage*, while it may cause an initial rise of blood-pressure of brief duration, produces as the net result a fall in

[1] Journal of Physiology, vol[illegible] Physiological Society

[illegible]t lower than the plain water and the case of plain water and of saline [illegible] in maximum and mean arterial pressure

[4] Journal of Physiology, vol xvii 1894

[5] Edinburgh Medical Journal, November, 1898

VII —Hard Cycling (one mile uphill against strong wind, cold day)

Before (standing)	73	175	140	15
After (standing)	160	205	160	35
10 minutes after (standing) ..	120	165	135	40
20 minutes after (standing) ..	100	167	135	45
30 minutes after (standing)... ..	96	173	130	37
50 minutes after (standing) ..	90	175	140	25
65 minutes after (standing) ..	90	175	140	17

* These numbers refer to exercises as numbered in Sandow's book.

It would appear, then, that these observations support the conclusions of Brunton and Tunnicliffe that the effect of exercise on the blood pressure will depend on the nature and severity of the work performed. The first effect of all forms is to raise the arterial pressures to an extent roughly proportionate to the amount of exertion, probably because increased output of the heart tending to raise the pressure is in excess of peripheral dilatation tending to lower it, the arterioles being as yet unrelaxed. If continued exercise be such as to markedly increase the frequency of the heart beat a rise in pressure results which is maintained throughout the exercise if that be severe, the factors tending to raise the pressure (whether increased output, diminished oxidation, or others) more than compensating for the widening of the periphery On the other hand, if the exercise be less severe and the pulse rate be not disturbed, arteriolar relaxation takes place while the output apparently may remain the same or at least be not greatly increased, so that a fall in pressure occurs In all cases the venous pressure rises, the extent of rise being in some degree a measure of peripheral dilatation After exercise of all kinds the arterial pressure falls below its original height, the venous pressure remaining raised, and the starting point of both is regained in from 20 minutes to an hour afterwards

The result obtained may vary to some extent with the condition of the subject experimented upon as to being accustomed or not to exercise inasmuch as moderate exercise may be to him relatively severe. Temperature also appears to be a factor of moment in determining the result, for the fall in pressure after moderate exercise is greater on a warm day and the subsequent return to normal occupies a longer period than in cold weather

Summary —1 Cold baths raise the arterial pressures, maximum and mean, and lower the venous pressure, after reaction the arterial pressure falls and the venous pressure rises 2 Percussion added to cold increases the rise in arterial pressure 3 Warm baths of plain water lower the arterial pressures and both absolutely and relatively lower the venous pressure 4 Turkish baths lower the arterial and venous pressures to a greater extent though the fall in venous pressure is proportionately not so great as that in arterial pressure 5 Saline baths at warm temperatures lower the arterial pressures to a greater extent than plain water baths at the same temperatures, the venous pressure, though absolutely lowered, is relatively raised, where the amount of saline material in solution is considerable a further lowering of arterial pressure takes place while the venous pressure becomes absolutely raised 6 Dry massage lowers the arterial pressures and relatively or absolutely raises the venous pressure provided the abdomen be not massaged too vigorously, when this is done a rise in all pressures occurs 7 Warm temperature *plus* massage, as in the Aix douche, has a more powerful effect in the same direction than dry massage alone The effect of a series of Aix douches is cumulative 8 The effect of exercise on the blood pressure depends upon the severity of exertion In all forms an initial rise in arterial pressure occurs, if the exercise be mild a fall occurs during its continuance, if severe the rise is maintained, after exercise, moderate or severe a fall takes place The venous pressure is raised during all forms of exercise and remains raised during the subsequent arterial fall The return to normal after exercise takes place more or less rapidly according to the gentleness or severity of the exercise and the temperature of the atmosphere

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DOUBLE PNEUMONIA IN THE SIXTH MONTH OF PREGNANCY, MISCARRIAGE, RELAPSE, RECOVERY

BY THOMAS OLIVER, M A DURH., M D GLASG, F R C P LOND,

PHYSICIAN TO THE ROYAL INFIRMARY, NEWCASTLE-ON TYNE.

IN forming a prognosis of pneumonia the circumstances that guide us are the extent to which the lung is involved, the age, habits, and physical condition of the patient, the presence of complications, and the height of the fever A double pneumonia is always a more serious affection than when part of one lung alone is involved Pneumonia is in most instances a localised expression of a constitutional disease owning a microbe for its cause, and death comes from cardiac failure or paralysis of the respiratory centre When inflammation of the lungs occurs in a woman far advanced in pregnancy, when her blood is so altered physiologically as to be pathological, the distended abdomen by preventing easy descent of the diaphragm creates a fresh mechanical obstacle to the breathing, thereby endangering life the more

On Feb 13th I was asked to see in consultation with Dr Taylor of Chester le Street an apparently healthy and well-developed woman aged 28 years She was lying in bed with her shoulders elevated, her face flushed, and she was breathing with difficulty There was no question as to her previous health or temperate habits She was the mother of two children and was near the end of the sixth month of pregnancy Six days before I saw her—i.e, on Feb 7th—she had gone to a concert and had felt very chilly when in the room and again after leaving the hall There was, however, no rigor On the following day there was a shiver and she complained of pain in her left shoulder That evening her temperature rose to 102° F and on the next day there were altered breath-sounds at the base of the left lung On the 10th there was dulness with tubular breathing both of which gradually became more pronounced. Next day very severe pain was complained of over the right costal arch and on the following morning—the day before I saw her—the base of the right lung, like the left, had become dull and was the seat of tubular breathing On the occasion of my visit the expectoration was viscid, of rusty colour, scanty, and difficult to remove from the mouth Owing to pain in both sides of the chest the patient could only lie in the recumbent position. The pulse was 126, the respirations were 48, and the temperature was 103° There was very marked hyper resonance in front and at the sides of the chest and the breath sounds were coarse in front The heart sounds were normal, but distinct pericardial friction could be heard as the root of the large vessels was approached Posteriorly the chest was absolutely dull on both sides from the mid lung downwards The breath sounds were extremely tubular over the left base where there were crepitation, exaggerated vocal fremitus, and vocal resonance The lower half of the right chest was also absolutely dull and there was heard loud tubular breathing The abdomen was very much enlarged and was mechanically causing embarrassment to the breathing The distended uterus could be palpated two inches above the umbilicus and the fœtal movements, which were hitherto extremely active, had not for several hours been felt The bowels were constipated The patient had taken her food well but since the commencement of her illness there had been practically speaking no sleep beyond snatches of a few minutes' duration There had been mild delirium. She was taking a mixture of solution of strychnia, tincture of digitalis, and cinchona which it was not considered necessary to alter Sinapisms were applied to the sides of the chest and a draught of bromidia was ordered to procure sleep if possible The most important question which Dr Taylor and I had before us for consideration was whether we should or should not induce premature labour It was only too apparent that the pregnancy was a serious complication and that if it could be got over quickly breathing would be relieved, on the other hand, there was the possibility that the patient might die during the labour—a process necessarily somewhat tedious since nature was not

the pressure falls below its original level Oliver[10] agrees with the general conclusion that exercise raises the mean arterial pressure, but he finds that this result is by no means invariable, the mean pressure, according to him, remaining stationary or even falling in some subjects after exercise He considers the invariable result of exercise, moderate or severe, to be a rise in maximum pressure, which, he says, is due to increased energy of contraction of the ventricle Whether the mean pressure becomes lowered or raised depends, he maintains, on the relation between the amount of arteriolar relaxation at the one end and the force of the ventricular pump at the other, the former being excessive without undue increase in the latter a fall in mean pressure results, and *vice versâ* a rise He further states that it is in subjects with a high mean pressure and relatively low venous pressure—that is, in subjects in whom peripheral resistance is high—that a fall in mean pressure is likely to follow exercise, and that when it does a marked rise in venous pressure occurs

In the endeavour to throw further light on the subject we examined the effects of exercise of various grades of severity from gentle resisted movements upwards through dumb-bell exercises requiring a gradually increasing amount of exertion to the strenuous labour of cycling rapidly uphill, with results which are tabulated below After corroborating the observation of Hill that the mere rising from the sitting posture and walking a few steps raises slightly the mean pressure we found that if the blood pressure be taken in any position with the muscular system relaxed, the rendering of the skeletal muscles throughout the body tightly rigid without holding the breath has the effect of at once raising the pressures—maximum, mean, and venous—to a considerable extent, the pulse frequency being also raised (See Exercise I) A transient fall in venous pressure may sometimes be noted immediately the muscles contract, probably from constriction of peripheral muscular arteries by contracting muscle fibre, the fall, however, rapidly gives way to a rise These changes may be explained as partly the result of increased output of the heart, as indicated by the moderate increase in the rate of beat, and partly the result of diminished capacity of the vessels, and the influence of an increased amount of carbonic acid in the blood must not be overlooked

With resistance movements performed gently without causing a rise in the pulse rate we obtained results corroborative of those of Brunton and Tunnicliffe—viz, an initial rise (or delayed fall, as in the example given) in mean and maximum arterial pressure, followed by a fall during continuance of movement, with a further fall subsequently and a gradual rise to normal, the venous pressure rising as the arterial pressure falls (Exercise II) Where, however, the resistance was made stronger and the exercise became such as to increase the frequency of pulse and respiration a rise in maximum pressure resulted, with a fall in mean pressure and a trebling of venous pressure (Exercise III) If the difference between the mean and maximum pressures, compared with the mean pressure as taken by the instrument, be any guide to the amount of force with which the blood is discharged it would appear that this must be here increased, and inasmuch as the mean arterial pressure is lowered the amount of peripheral dilatation must be such as to more than counterbalance the effect of increased output, which would tend to raise the mean pressure if other factors remained constant

Dumb-bell exercises were next taken, those advocated by Sandow[11] being chosen as putting into action successively the main groups of muscles in the body When slowly and deliberately performed, to avoid quickening either pulse or respiration, an initial rise in all pressures occurred with a subsequent fall during the exercise in arterial pressures and a further rise in venous pressure, the return to normal being complete in 20 minutes after cessation of exercise (Exercise IV) This result is practically identical with that given by gentle resisted movements The same exercises performed more rapidly and vigorously gave as the net result a lowering of mean pressure with slight rise in maximum pressure and a doubling of venous pressure, the exercise apparently increasing the output of the heart without disturbing the rate of working (Exercise V) When performed more rapidly still and with great vigour in order to quicken the pulse the initial rise in arterial pressure became more marked, increased as the exercise continued, and was sustained to the end, the venous pressure showing a marked rise Afterwards, however, the mean pressure fell to below normal, while the maximum and venous pressures also fell slightly but still remained well above normal The effect was of brief duration, for 25 minutes after discontinuing exercise the arterial pressures regained their original level, the venous pressure remaining slightly raised (Exercise VI) The violent exertion of cycling rapidly uphill against a strong wind caused a rise in maximum pressure with a rise to a less extent in the mean pressure and a large rise in venous pressure, respiration and pulse rate being greatly accelerated The arterial pressures fell after exercise to below normal, while the venous pressure rose higher, as occurred in the preceding case, of which this is merely an exaggeration The length of time that elapsed before the starting point of pressure was regained was greater after the more severe exercise (Exercise VII) In these two instances the marked rise in venous pressure would seem to indicate a considerable degree of peripheral dilatation In endeavouring to account for the rise in arterial pressure the effect of increased CO_2 must again be considered Possibly the rise may be attributed partly to this cause and partly to increased output of the heart, notwithstanding Stewart's statement that where the pulse rate is greatly increased the output per heart beat is diminished and the output per second may or may not alter but is usually also diminished

I—Rigidity

—	Pulse-rate.	Arterial pressure, mm Hg		Venous pressure mm. Hg.
		Maximum.	Mean.	
Before (sitting)	72	185	135	25
Muscles rigid (sitting)	86	200	150	35
II—Resistance Exercises (gentle)				
Before (sitting)	74	175	130	10
After five minutes exercise (sitting) ..	74	175	130	10
After 20 minutes' exercise (sitting)	68	165	120	20
10 minutes afterwards (sitting)	68	160	115	20
25 minutes afterwards (sitting)	68	175	130	10
III—Resistance Exercises (more severe)				
Before (sitting)	84	165	125	7
After 15 minutes' strong resistance exercises, respirations increased (sitting)	94	175	110	22
15 minutes after (sitting)	84	165	105	17
35 minutes after (sitting)	84	165	120	10
IV—Sandow's Exercises (5 lb dumb bells, very slowly performed)				
Before (sitting)	75	187	150	20
After seven minutes exercise (sitting)	76	195	155	25
After 15 minutes' exercise (sitting)	74	175	135	30
20 minutes after (sitting)	75	185	150	20
V—Sandow's Exercises (5 lb dumb bells, moderately severe)				
Before (recumbent)	66	155	125	7
After 25 minutes exercises (recumbent)	68	160	110	15
VI—Sandow's Exercises (5lb dumb-bells, severe, and rapidly performed)				
Before (sitting)	66	160	120	15
After two-arm and two-leg exercises rapidly done (sitting)	84	175	170	27
After exercises 3-6* (sitting)	84	170	125	35
After exercises 7-12* (sitting)	94	165	135	37
After whole series, 20 minutes (sitting)	96	160	125	50
Five minutes after (sitting)	81	170	110	30
15 minutes after (sitting)	72	165	115	27
25 minutes after (sitting) ..	68	160	120	20

[10] Edinburgh Medical Journal, October 1898.
[11] Strength and How to Obtain It, by E. Sandow London, 1897

VII—Hard Cycling (one mile uphill against strong wind, cold day)

Before (standing)	78	175	140	15
After (standing)	160	205	160	35
10 minutes after (standing)	120	165	135	40
20 minutes after (standing)	100	167	135	45
35 minutes after (standing)	96	173	130	37
50 minutes after (standing)	90	175	140	25
65 minutes after (standing)	90	175	140	17

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On Feb 13th I was asked to see in consultation with Dr Taylor of Chester le Street an apparently healthy and well developed woman aged 28 years She was lying in bed with her shoulders elevated, her face flushed, and she was breathing with difficulty There was no question as to her previous health or temperate habits She was the mother of two children and was near the end of the sixth month of pregnancy Six days before I saw her—i e, on Feb 7th—she had gone to a concert and had felt very chilly when in the room and again after leaving the hall There was, however, no rigor On the following day there was a shiver and she complained of pain in her left shoulder That evening her temperature rose to 102° F and on the next day there were altered breath-sounds at the base of the left lung On the 10th there was dulness with tubular breathing, both of which gradually became more pronounced. Next day very severe pain was complained of over the right costal arch and on the following morning—the day before I saw her—the base of the right lung, like the left had become dull and was the seat of tubular breathing On the occasion of my visit the expectoration was viscid, of rusty colour, scanty, and difficult to remove from the mouth Owing to pain in both sides of the chest the patient could only lie in the recumbent position The pulse was 126, the respirations were 48, and the temperature was 103° There was very marked hyper resonance in front and at the sides of the chest and the breath sounds were coarse in front The heart sounds were normal, but distinct pericardial friction could be heard as the root of the large vessels was approached Posteriorly the chest was absolutely dull on both sides from the mid lung downwards The breath sounds were extremely tubular over the left base where there were crepitation, exaggerated vocal fremitus, and vocal resonance The lower half of the right chest was also absolutely dull and there was heard loud tubular breathing The abdomen was very much enlarged and was mechanically causing embarrassment to the breathing The distended uterus could be palpated two inches above the umbilicus and the fœtal movements, which were hitherto extremely active, had not for several hours been felt The bowels were constipated The patient had taken her food well but since the commencement of her illness there had been, practically speaking no sleep beyond snatches of a few minutes' duration. There had been mild delirium She was taking a mixture of solution of strychnia, tincture of digitalis and cinchona, which it was not considered necessary to alter Sinapisms were applied to the sides of the chest and a draught of bromidia was ordered to procure sleep if possible The most important question which Dr Taylor and I had before us for consideration was whether we should or should not induce premature labour It was only too apparent that the pregnancy was a serious complication and that if it could be got over quickly breathing would be relieved, on the other hand, there was the possibility that the patient might die during the labour—a process necessarily somewhat tedious since nature was no

prepared for the event, and besides there was just the chance that the problem would be solved by miscarriage We decided not to terminate the pregnancy

The after course of the illness is extremely interesting Two or three hours after I left her she was seized with labour pains These came on at 10 45 P M, and before 11 5 P M, when Dr Taylor reached her, the child was born There is some doubt as to the whether the child was born alive, but it was dead on Dr Taylor's arrival There was no trouble with the placenta and the lochia, though scanty, remained healthy throughout The interesting and fortunate circumstance in regard to the confinement is that while we rather dreaded a miscarriage on account of the compulsory holding of the breath which expulsion pains naturally cause the labour was completed in less than 20 minutes, and it seemed as if the act of parturition disturbed the patient very little No necropsy was made upon the infant Once the mother's temperature began to fall to 100° she was overcome by sleep, at times so profound as to over power her even when engaged in ordinary conversation It was a deeper somnolence than ordinarily occurs after pneumonia By Feb 26th the patient was well again She had been up for a few days, her pulse and temperature having been normal, but on this date she was again seized with pain in the right chest and on the following day there was distinct dulness with tubular breathing over the upper part of the left mid lung posteriorly, her pulse rose to 120 and her temperature rose to 102° The expectoration which had been absent for several days again returned and it was observed to be rusty once more On the third day after the relapse the pulse fell to 100, the temperature declined to 100 5°, the respirations to 24, and the patient expressed herself as feeling comfortable and free from any pulmonary embarrassment It was not until March 5th, however, that the lung showed signs of clearing up and the temperature stood at 99° morning and evening The urine never contained albumin The first attack of pneumonia lasted 11 days, but the second was of only seven days' duration and was unaccompanied by the extreme prostration and the hurried and anxious breathing noticeable in the original illness That it was a veritable relapse was shown by a bacteriological examination of the sputum Some of the expectoration of March 4th was sent to Dr Hardcastle, demonstrator of bacteriology in the Durham University College of Medicine, and he reported (1) as the result of staining that the sputum contained pneumococci, and (2) that in an agar agar cultivation the colonies appeared like drops of dew on the agar which when examined microscopically proved to be diplococcic That the micro-organisms were pneumococcic is beyond dispute

When pneumonia attacks a pregnant woman there is naturally a risk to both the mother and the child Miscarriage takes place in a very large percentage of these cases The death rate, too, is high In Hirst's "American System of Obstetrics" mention is made of 43 cases of pneumonia occurring during pregnancy In 21 of these there was premature expulsion of the fœtus 28 of the 43 patients had not passed the sixth month of pregnancy, and of these 11 aborted, while of the remaining 15 who had exceeded this period the pregnancy terminated prematurely in 10 From these statistics it would appear as if the tendency to abortion increased with the advance of pregnancy Of the 15 women seized with pneumonia after the sixth month of pregnancy seven died It was Tarnier's opinion that "the more advanced the pregnancy the greater the probability of an expulsion of the fœtus and the graver the prognosis for mother and child"

My own experience leads me to express the opinion that so far as treatment is concerned it is better not to attempt to end the pregnancy It was only too apparent in our patient that if the uterus could have been rapidly emptied there would have been a gain of air space to the mother, but those of us who have had to empty a pregnant uterus short of the full term know the difficulties of the process and are aware of the risks to which maternal and fœtal life are exposed Nature will neither be taken unawares nor will she be hurried beyond limits at this particular period The induction of premature labour, however rapid, is always tedious and a woman may die during the operation The muscular pains and the sudden expulsion of the fœtus act too frequently like surgical shock to the mother Add to these pneumonia and what can be the effect of strong expulsive pains with suspended respiration but for more blood to be thrown into already damaged lungs and an extra strain imposed upon the heart? In the treatment of disease we rely upon experience What, then, is the verdict of experience in regard to the induction of premature labour when severe pneumonia complicates pregnancy? Statistics certainly do not favour obstetrical interference Of 18 women who were the subjects of pneumonia and in whom the pregnancy was interrupted Matton[1] informs us that nine died, while of 20 women suffering from pneumonia but whose pregnancy was not interfered with only one died As regards the children born under these circumstances it may be said that most of them are born dead or die very shortly after birth and when a necropsy has been made the lungs have been found affected and the internal organs congested

Pneumonia itself tends to terminate a pregnancy Nearly one half of the women who are affected abort In all these cases fever is an important element, it increases the danger by quickening the respiration and causing cardiac failure. Pneumonia interrupts pregnancy in about one third of all cases before the sixth month and in two thirds between the sixth and ninth months The maternal mortality may reach 50 per cent, while that of the fœtus rises higher, being probably nearer 80 than 50 per cent It is needless to add that when labour occurs in pregnancy complicated by pneumonia it is the duty of the practitioner if the parts are at all dilateable and the head presenting to shorten the process as far as possible by the gentle use of the forceps, keeping an eye on the patient afterwards for cyanosis Should this develop he should not be in too great a hurry to check any reasonable amount of bleeding that may be present.

Newcastle-on Tyne

A CASE OF ULCERATIVE ENDOCARDITIS TREATED WITH ANTI-STREPTOCOCCIC SERUM

By BERTRAM M H ROGERS, B A, M D, B CH OXON,
PHYSICIAN AND PATHOLOGIST TO THE ROYAL HOSPITAL FOR SICK CHILDREN AND WOMEN, BRISTOL.

ANTI STREPTOCOCCIC serum is still on its trial and the following case may be recorded without prejudice and help to define its value as a remedial agent I say "without prejudice," as a single case, though it may be as complete as the one now described, is of little value, but taken in conjunction with the others already reported and possibly with others still to appear it will be useful Though recoveries have been recorded the disease is almost universally fatal, so that any serum or other agent which would counteract the toxin would be most acceptable The chief difficulty lies in the fact that we have to deal with a disease in which the infection may be caused by several distinct micro-organisms, or a group of organisms, while the symptoms appear the same in every case It is only by a cultivation from the blood in each case that the cause can definitely be ascertained and as yet we have a serum to counteract the toxin of streptococci only, and it is even doubtful whether it will cure every case of streptococcic infection The present case was so typical clinically of ulcerative endocarditis that it need only be reported in brief

A boy, aged 10 years, was admitted into the Royal Hospital for Sick Women and Children, Bristol, in October, 1898, with acute rheumatism of the big joints There was a soft systolic murmur at the apex of the heart Under treatment the swelling of the joints disappeared, but the temperature continued between 100° and 103° F The patient then developed pleurisy in the left axillary region and some bronchitis These in their turn got better, but the spleen became enlarged and tender The temperature continued high and a double murmur developed at the base of the heart, and a trace of albumin appeared in the urine Diagnosing the condition to be one of ulcerative endocarditis of the aortic valves I asked Dr J O Symes, the bacteriologist to the infirmary, to examine the blood bacteriologically He reported as follows, the blood being examined on Nov 28th, 1898 "Two cubic centimetres of blood were taken from the arm in the following manner A tape was tied tightly round the upper arm midway between

[1] Journal de Médecine de Bruxelles, 1872 p. 412.

the shoulder and the elbow The skin over the front of the elbow joint was disinfected by treating with ether and then with perchloride of mercury The needle of a sterilised hypodermic syringe was then plunged into one of the distended veins in the disinfected area and the blood drawn off and spread on agar tubes and incubated for 24 hours It showed a pure cultivation of streptococci A second specimen, taken on Dec. 2nd, also showed after incubation a pure streptococcic growth Blood films stained direct showed diplococci, probably streptococci, in one specimen" The case therefore seemed a very suitable one for treatment with anti streptococcic serum and accordingly on Dec. 11th, 13th, 16th, 18th, and 19th 10 cubic centimetres of serum, which was obtained from the Jenner Institute through a local firm, were injected. The effect was absolutely *nil* as regards improvement The condition of the heart remained the same, the fever continued as before and the spleen remained large and tender Moreover, the injections were extremely painful, the boy screaming with pain on each occasion of their administration On this account and because they produced no good effect no further injections were given They did no harm and that is about all that can be said about them The boy s condition remained as unsatisfactory as before, double murmurs developed at the base of the heart, the spleen became very tender, and at times rheumatic pains returned in various joints In addition he had a very tender spot in the left popliteal space with œdema of the leg and foot and at another time great swelling of the scrotum The patient became emaciated to a shadow and died on Jan 9th, 1899, with indistinct evidence of brain trouble

The necropsy was performed by myself about 24 hours after death On opening the abdomen some quantity of clear fluid escaped and the omentum had a dark green appearance due to lines of dark pigmented matter running beside the vessels This is an appearance I do not recollect having ever seen before Scattered about the intestines were a few bright red spots due to small infarcts which were evidently of quite recent origin. The spleen was large weighing 17½ ounces, and was firmly adherent to the diaphragm the stomach, and the omentum. Though it was with the greatest care that I attempted to remove it a small tear was made from which a large bead of thick yellow pus oozed out Dr Symes who was present immediately inoculated a tube with a sterile wire and made a cover glass preparation The results will be referred to later In the spleen there were five infarcts, all but one of which were of the usual yellow colour, and this was of large size and of a deep red colour The liver was large and like a nutmeg in appearance such as one would expect to find in a person who had suffered for some time from the condition of the heart which this patient had The heart was much dilated and hypertrophied The valves on its right side were healthy, but those on the left were much diseased, the mitral being slightly thickened and the aortic almost entirely covered with immense vegetations By some fortunate circumstance in opening the heart the scissors passed between the anterior and right posterior segments so that the valves were not divided and the exact condition of all three was preserved The anterior valve had no vegetations on it but was much smaller than it should have been and had lost its corpus Arantii in the centre It was evidently incompetent The left posterior had two of the longest vegetations which it has been my fortune to see, one in the recent state being nearly half an inch long The right posterior had also a large vegetation, while above it and also above the left were small growths on the surface of the aorta A tube was inoculated from the blood of the heart by Dr Symes before the organ was opened Both lungs were healthy both pleural cavities contained a small quantity of clear fluid, and the mediastinal tissue was œdematous In the left axillary region were some long fibrous adhesions which looked just like the strings of a harp The kidneys were normal except for slight congestion of the pyramids and contained no infarcts The brain was normal but in the right anterior cerebral artery a small clot was found which was pale in colour and not adherent to the wall of the vessel. It was evidently a recent embolus The cultivations which were made at the post-mortem examination showed a mixed growth of streptococcus and staphylococcus aureus and the cover-glass preparations also showed both organisms

It appears to me that in order to get favourable results from anti-streptococcic serum we must be sure of three facts (1) that there is endocarditis, (2) that the endocarditis is infective, and (3) that the infection is due to streptococci In this case all three facts were certain, although I am quite ready to admit that at the time of death staphylococci were present How they gained access is another matter They were not present on the two occasions when the blood was examined during life, so I was quite justified in expecting good results—if good results are to be got—from the serum I find that several cases have been reported in medical periodicals of similar conditions treated by serum Dr Sainsbury[1] has reported the case of a boy, aged 13 years, who was injected with 70 cubic centimetres in six doses Streptococci were cultivated from the blood and the patient recovered Dr Sainsbury mentions another case in which the result was unfavourable, but, the patient had extensive kidney disease which may have counteracted or prevented the good effect of the serum. Dr Fox[2] reports the case of a man, aged 36 years, who had 20 injections and who died No micro-organisms were found till the post-mortem examination when streptococci were cultivated Another case is reported by Dr Washbourn,[3] that of a woman, aged 20 years, who after the injection of 1030 cubic centimetres of serum recovered. The improvement was noticeable very soon but no examination of the blood was made A successful case is published by Margaret Pearse[4] in which the patient was a girl aged 16 years and 87½ cubic centimetres were injected in eight doses No examination of the blood was made till after the treatment was begun, which may account for no micro-organism being found Ulcerative endocarditis is not always caused by streptococci alone, for there are cases of mixed infection and others in which the cause appears to be due to pneumococci or gonococci or others, and no means exist of knowing to what the infection is due except cultivations of blood drawn direct from a vein This requires special skill and experience and I am much indebted to Dr Symes for the trouble he took over this case How often the infection is due to streptococci is also unknown, but Kanthack[5] found it present in about a third of the cases he examined

I cannot help feeling that as yet the good effect of the serum in these cases has to be proved No doubt to cure ulcerative endocarditis or even relieve it is a severe test to which to put it I can only hope that others who have had experience whether favourable or unfavourable to the serum, may be induced to publish their results, so that we may be able to judge as to its real value from a good number of cases

Clifton, Bristol.

ON SYSTEMATIC MUSCULAR DEVELOPMENT AS A RADICAL CURE OF HERNIA

BY A A WARDEN, M D GLASG

THE occurrence of a hernia is due to a lack of balance between the intra abdominal pressure and the resistance of the parietes The one or the other element may be the predominant factor—i e, the muscular and aponeurotic development may be fairly normal and only give way under the stress of a sudden and excessive strain, or they may be poorly developed and what may be termed a normal effort suffices to produce the hernia Practically all hernias are situated at those parts of the abdomen where the integrity of the parietes is impaired by the exit or passage of vessels nerves, or other structures—e g, the inguinal ring with the spermatic cord, &c, the femoral arch with the femoral vessels, &c, the umbilical ring where were situated the fœtal structures, the obturator foramen, &c

It is unnecessary to go into much anatomical detail for there are perhaps few subjects of surgical importance which have been more discussed investigated, and written about than that of hernia from every point of view I may venture however, to refer to one or two details which though well

[1] THE LANCET Oct 17th, 1896, p. 1070
[2] THE LANCET Feb. 20th 1897 p. 520.
[3] THE LANCET Sept. 18th, 1897 p. 707
[4] THE LANCET July 10th, 1897 p. 92.
[5] Edinburgh Medical Journal, vol. ii. 1897 p. 13.

known seem to bear a new importance in support of the present thesis 1 The deeper of the two layers of the superficial abdominal fascia contains much yellow elastic tissue capable of development [1] It forms one of the strongest of the various portions of the abdominal wall and is more or less intimately connected with the external oblique muscle and its fascia 2 The intercolumnar fibres which extend partially across the superficial abdominal opening in the aponeurosis of the external oblique muscle are "slender" and send a "thin membrane" downwards upon the spermatic cord [2] The "internal pillar" which goes to form Gimbernat's ligament sends a reflection of fibres upwards and inwards which reach the middle line and become incorporated with the sheath of the rectus muscle 3 The aponeurosis of the internal oblique is inseparably united with the aponeurosis of the external oblique and that of the transversalis 4 The transversalis fascia is, thanks presumably to nature's provision, strongest in the lower part of the abdomen and encloses, as it were, the femoral vessels as they pass under Poupart's ligament From the margins of the opening of the internal abdominal ring the "delicate" infundibuliform fascia is prolonged upon the cord or the round ligament [3] I contend that each and all of these structures, which are of vital importance in the production of all herniæ, are capable, by suitable measures, of great increase in vascularity in muscular and aponeurotic substance, and therefore in thickness and resistance to the extrusion of any viscus

Although not a few surgeons operate upon hernia in infants of two and three years of age and under, it may, I think, be considered the more general practice to recommend the prolonged use of a well made truss Every practitioner has many cases in his mind's eye in which this treatment has been successful as a "radical"—i e , complete—cure, and adult life is reached without any signs of the old hernia As Mr Eccles remarks in his paper on the Treatment of Inguinal Hernia in Children,[4] "permanent closure of the processus vaginalis will be obtained in the majority of cases only after a continuous action of the pressure of a spring truss over a period of some years A cure, therefore, can be safely predicted, but the truss should not be discarded until the child has reached the age of at least three years " Such a result can only be explained by the development of the child and a gradual process of more or less complete closure of the hernial sac

In adults, however, the case is different and if the verdict of the surgeon be cast for treatment by bandage it is rare that an expectation of "cure" is held out, the patient being rather bidden to choose between the alternatives of operation with cure or a truss for the rest of his life with constant exposure to descent of the hernia, irreducibility, and even strangulation—the truss, that is to say, is regarded merely as a palliative measure

Now, the operative treatment of a small hernia in a young adult is not to be entered upon lightly It is a plastic operation and yet a major one An untoward result, though rare, is yet one of the most terrible "calamities of surgery " Nor is the profession decided as to the best method of operating, almost every eminent surgeon having given his name to one or other procedure "Plurimæ leges corruptissima respublica," remarks Tacitus, and it may safely be said that as no one method has generally superseded all others so we are still looking out for an infallible operation, operative treatment remaining in many cases an ultimate necessity Taking as a type the ordinary small reducible inguinal hernia my treatment is as follows 1 Keep the hernia within the abdomen continuously and permanently by means of a well applied truss which may be changed for another of stronger pressure, of greater mobility, of different material, &c , as circumstances may demand 2 Systematically develop by suitable exercises to the greatest extent possible the muscular and aponeurotic structures of the abdominal wall [5] A few words upon each of these two points

1 *The truss* —The hernia once recognised, and the truss properly applied, must not be allowed to descend One such complete descent may annul the results of weeks of treatment A special truss should be used when the patient is in the bath and, if necessary, even when in bed in the horizontal position On no account must the bowel enter even the internal inguinal aperture As to the truss the French and English forms differ considerably and on the whole I think the former is to be preferred on account of its greater simplicity and lightness During some of the exercises prescribed the truss may be dispensed with altogether as the patient is on the horizontal plane with the pelvis possibly a little raised, or a lighter, more mobile truss which permits greater freedom of movement may be used Such are well made by Rainal Brothers, Paris

2 *The muscular development* —I do not think that it will be denied that when a truss is worn the advice is usually given to the wearer to avoid all muscular effort The consequence is that a more or less sedative life is led, the abdominal parietes atrophy muscularly rather than gain strength, or adipose tissue is formed, and the inguinal canal becomes less and less resistant to the extrusion of the hernia On the contrary, I advocate the practice of all such muscular effort as will not tend to force the hernia into its sac and if the truss be an adequate one there are few reasonable exercises that need be forbidden. Those who have examined some of our public school or university athletes must have been struck with the extraordinary part taken in their general muscular development by the abdominal muscles When contracted the tendinous intersections of the recti are well-marked hollows and the mass of the obliques at each side is not only easily distinguishable but becomes actually prominent Gymnasts and "strong men" show this to an even greater extent and if the inguinal canal of such subjects be examined it is surprising to find how small and how firm the internal ring is and how much slighter the impulse upon coughing is than can be elicited in the more normal individual

I have followed a number of cases now in which a great increase of development has been obtained in three months, six months, or a year by patient and suitable training The means used may be simple movements as indicated in the Swedish system, better still by resisted movements by means of one or other of the "exercisers" now in such popular and varied use It is probable that the abdominal muscles contract more or less together and that isolated action of one or other is exceptional In sitting up, for instance, the obliques aid the recti muscles, but in rotation with fixture of the pelvis the share of the recti muscles must be insignificant The action of these muscles varies according as the vertebral column, the pelvis, or the thorax are fixed. They are also thrown into a state of contraction when any violent muscular effort is made, thus bracing the parietes of the abdomen and supporting its contents They come into use in forcible expiration and in efforts of expulsion from the thoracic and abdominal cavities

The common sense therefore, both of the surgeon and of his patient will suggest the simple exercises necessary or expedient Among the best are the following 1 The patient, with his hands at his side, raises himself from the dorsal decubitus to a sitting posture 20 or 30 times twice or oftener a day 2 Similarly, from the horizontal position, let both legs be raised from the ground almost to the perpendicular This also 20 or 30 times till there is distinct fatigue 3 Modify the first of these three exercises by raising the body sideways in a rotatory movement and thus exercise the obliques Similar modifications may be introduced by extending the arms during the movements, by the use of dumb-bells or exercisers, and so on

Paris

[1] Quain, tenth edition, vol. ii., part 2, p. 327
[2] Loc. cit., p 329. [3] Loc. cit. p. 336.
[4] Brit. Med. Jour May 13th, 1899, p. 1148.
[5] This last principle is gradually being recognised in France—usually the last country to appreciate the value of physical exercise—and Lucas-Championnière considers the bicycle to be the ideal form of exercise for the subject of hernia both when wearing a truss and after having been operated upon.

COMPLIMENTARY DINNER.—On May 26th Mr Robert Stirling, M B , C M Glasg , of New Cumnock, Ayrshire, on his leaving the burgh, where he had been in practice between eight and nine years, was entertained to dinner at the Afton Hotel by his friends in testimony of their high regard for him

LLANELLY HOSPITAL.—The annual report of the Llanelly Hospital for 1898, which has just been issued, states that at the end of 1897 the institution had an unfavourable balance of £1000, but that at present there was a balance in hand of £192 The committee had found it necessary to reduce the number of beds, but doubtless this number would now be increased The average weekly cost per patient was 9*s* 2½*d* for maintenance and 13*s* 6*d* for administration Mr Studt had offered to guarantee a sum of £500 for the next two years conditionally upon the working men doubling their subscriptions

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

NOTE ON A CASE OF HERNIA OF THE VERMIFORM APPENDIX INTO AN OLD FEMORAL SAC

BY THOMAS F CHAVASSE M C EDIN, F R C S EDIN & ENG,

SENIOR SURGEON TO THE BIRMINGHAM GENERAL HOSPITAL.

THE case here recorded resembles in many particulars those recently described by Mr Edmund Owen and Mr W H Battle [1]

On May 8th, 1899, I saw in consultation with Mr Arthur Jackson of Smethwick, Birmingham, a patient, aged 65 years, a widow, and the mother of 10 children, who for some years had suffered from a small umbilical hernia for which a suitable belt and pad were worn with advantage She was also afflicted with rheumatoid arthritis of the hip joint and she had noticed for some years that from time to time a substance made its appearance in the position of a femoral hernia on the right side which was most marked if any straining took place during the acts of micturition and defecation During the first week in May she became aware that the lump was persistent, that it was larger than ever before, and also that it was hard, she therefore consulted Mr Jackson, who sent her to bed and applied heat As no appreciable change took place a consultation was held On examination a fixed tumour was found to exist at the base of Scarpa's triangle, about three inches long, overlapping Poupart's ligament and tailing off towards the pubes This was hard to the touch, irreducible and painless, with a suggestion of deep-seated fluctuation There was no impulse on coughing and the skin was unaffected The bowels acted regularly and freely The diagnosis apparently lay between femoral adenitis and some inflamed omentum in an old femoral sac As the patient was adverse to any exploratory operation an expectant line of treatment was adopted and under the influence of rest and heat the lump gradually lessened in size On May 19th a second consultation was held The tumour was then of about the size of a Tangerine orange, soft and fluctuant, but containing in its deeper parts a hard mass which felt like the unsoftened portion of a lymphatic gland On our urging the necessity of operative interference consent was given On the following day (May 20th), with the assistance of Mr Arthur Jackson and Mr Wilfrid Jackson, I made a longitudinal incision into the tumour which gave exit to about six drachms of a dark-coloured serous fluid and revealed an old femoral sac one-eighth of an inch thick containing a much congested appendix, three inches in length and of the thickness of an ordinary forefinger, curled up with the free end to the right At first sight this looked like a knuckle of small intestine Its mesocolon lay to the outer side and a small mass of adherent omentum lay to the inner side The appendix was removed in the ordinary manner up to the crural ring and the stump was pushed back into the peritoneal cavity The omentum adherent to the inner side of the sac was dissected off, ligatured and removed The sac itself was then freed to its neck, ligatured, and cut away, and the skin incision was closed by sutures after the insertion of an iodoform gauze drain No unfavourable symptoms followed the operation

This case apparently bears out the contention of Mr McAdam Eccles that the inflammation of the appendix in these instances often takes place after its prolapse into the hernial sac and that the strangulation is secondary, being caused by the acute inflammatory processes taking place in a confined space In this patient the crural ring was apparently of about the normal size and the stump of the appendix readily slipped back into the abdominal cavity, showing that its neck was not nipped Judging by the thickness of the sac and the adhesions of the omentum the hernia had probably been in existence for a long period in an irreducible form Mr Jackson states that three weeks before he was first consulted the patient, when assisting to nurse a sick relative, accidentally received a blow in the region of the caecum and this possibly may have been a contributing factor to the prolapse of the appendix When removed this organ especially at its free end, was very œdematous and if it had been allowed to remain might eventually have become gangrenous from the effects of the inflammatory exudations It contained no concretion or other foreign body As in the cases of Mr Edmund Owen and Mr W H Battle this patient was a married woman advanced in years and my experience is quite in agreement with that of the former surgeon as to the rarity of this condition, this being the first case which I have ever met with either in my hospital practice or in my private practice

Birmingham

[1] THE LANCET May 6th, 1899 pp. 1222, 1223

NOTES ON A CASE OF ADDISON'S DISEASE TREATED WITH SUPRARENAL EXTRACT

BY ARTHUR FOSTER, M D, C M EDIN

IN October, 1898, I was consulted by a robust woman, aged 38 years, a weaver by trade, for symptoms of well-marked Addison's disease She had had three normal labours, the last at 23 years of age Menstruation began at 14 years of age, and except with the interruptions of pregnancy continued to be perfectly regular up to the age of 28 years at which time she "caught cold" and since then had not had the slightest sign of it The first symptoms of the disease developed in April, 1898, when she was compelled to give up her employment owing to a feeling of lassitude and debility This continued to increase and was accompanied by discolouration of the skin, the first place for it to be noticed being the forehead, on which there were several dirty patches which the patient vainly endeavoured to wash off Her family history was exceptionally good, both parents having lived to over 70 years of age She had three sisters all married and having large families, and all past a normal menopause There was no history of any tuberculous or malignant disease to be found in any of the living or dead members of the family On examination the only pain complained of was in the back over the region of the suprarenal glands It had been present for four months The pulse was small and it varied from 58 to 64 The heart's impulse was scarcely perceptible and the sounds were decidedly weak The least exertion caused breathlessness and faintness and on this account the patient was unable to get out of bed Her stomach was in fair condition, though she had recently had several attacks of vomiting—an unusual occurrence for her The anterior third of the tongue was pigmented and she had a perfect set of teeth The pigmentation affected the whole body more or less and was especially well marked on the forehead, neck, arms, and round the nipples The amount and specific gravity of the urine were normal and there was no albumin On vaginal examination the uterus was felt to be atrophied and the ovaries could not be palpated The mammæ were small for a woman of her age and build She was at once given five grain tabloids of suprarenal gland substance, taking four a day At the end of a month the pain in the back had disappeared, the pulse averaged 68, and she was able to sit up for several hours without discomfort During November she contracted influenza and again became confined to bed However, in December she recruited, and though she had lost flesh she felt better than she had at any time since she began to take the tabloids The faintness almost disappeared and the pulse now averaged 80 She was still taking four or five tabloids a day A greater quantity produced nausea At the end of February, 1899, she had an attack of diarrhœa and vomiting accompanied by several severe faints and she again became confined to bed She continued losing ground until March 15th, when convulsions set in and becoming comatose she died 24 hours later No post-mortem examination was obtainable

The points of interest which spring from the case appear to me to be the following 1 The question whether the early cessation of the ovarian function and that of the suprarenal glands have a common cause I do not know of any relationship having been shown to take place between the capsules on the one hand and the ovaries on the other, the point is, however, worth keeping in mind 2 The rare termination of Addison's disease in epileptic fits 3 The effect of suprarenal gland treatment The patient certainly

got some relief from it The pain in the back disappeared and the pulse was quickened She always expressed herself as feeling better after taking the tabloids, she said that she felt more faint when she missed a day She took them up to a fortnight before her death The pigmentation did not appear to be influenced in any way by them

Blackburn.

NOTES ON A CASE OF "LUPUS LYMPHATICUS" OF THE EYEBALL

BY DAVID WALSH, M D EDIN,
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THE following case is one of such rarity as perhaps to warrant a short account in the pages of THE LANCET So far as we can ascertain few similar cases have hitherto been recorded in this country Fortunately there can be no doubt as to the diagnosis, for the patient was shown at the Dermatological Society of Great Britain and Ireland on June 29th, 1898 The diagnosis was there confirmed by the President (Dr Radcliffe Crocker) and other members present Dr Crocker agreed that the case came within the same category as those called by Mr Hutchinson "lupus lymphaticus" but which he himself called "lymphangiectodes" or "lymphangioma circumscriptum" The case is briefly as follows

A single woman, aged 18 years, who was seen by both of us in May, 1898, complained of a disfiguring condition of the right eyeball and lids which had existed ce infancy but which had not got worse The patient's ..eral health was good and she was well nourished No family history was available As regards the right eye, externally there was apparent lengthening of the eyebrow, and the eyeball was prominent The palpebral fissure measured 38 millimetres, as against 26 millimetres in the left eye The lids were swollen and thickened but could be distinctly pitted on moderately firm pressure The inter-..nal space was twice as broad as was that of the other eye The cornea was small, the globe was of less size than was that of the sound eye, and there was an external strabismus of 25° The ocular conjunctiva showed a nævoid and vesicular condition as we have described later in detail in this note The vision of the left eye equalled $\frac{6}{9}$ (Jaeger) With the right eye the patient could make out the number of fingers held up against a strong light at a distance of one metre The disc of the right eye was ill defined, the retinal vessels were large and rather tortuous Both eyes showed dotted opacities in the lens, less marked in the left eye Several strands of persistent pupillary membrane were present in the right eye, which presented an external nævoid condition There were an enlarged caruncle and an enlarged semilunar fold which had a pale œdematous look The fold was merged above and below in thickened conjunctiva and externally it was continuous with a translucent and vascular growth on the ocular conjunctiva This growth consisted of a number of jelly like elevations, arranged roughly in the shape of a ring round the cornea, leaving a clear space of about one eighth of an inch at the corneal margin except at its upper segment where the growth impinged on the cornea These yellowish translucent elevations had numerous punctate hæmorrhagic injections and fine blood vessels In places the jelly lik..e bodies were about one eighth of an inch in thickness and were pouch like The patient stated that the eyel.. ..d got black at times and that there used to be a lum.. of the orbit The capill.. ..ies on the cheeks were dilated sometimes at the inner angle

The chief interest of this condition lies in its exact resemblance to M.. ..r Jonathan Hutchinson's "lupus lymphaticus" The ..jelly like pouches on the eyeball were clearly varicose l.. ..ymphatics It seems possible from the history and f.. ..om the dilated surface capillaries and congested ..nal vessels that the eyelids and orbital contents generally may be affected with a mixed vascular and lymphatic nævus In that case it is interesting to note the differing appearances of what we must assume to be a common underlying pathological condition The elephantiasis of the eyelid and the nævus lymphaticus of the eyeball, if this view of common origin be accepted, are possibly two distinct expressions of some congenital local affection of angio lymphatic type The present lesion is congenital, non infective, chronic, and associated with congenital nævoid manifestations Mr Hutchinson figures a patch at the back of the tongue in a young girl and remarks that the aspect of the mucous membrane exactly resembles that of the skin The present case does not exactly tally with Mr Hutchinson's lupus lymphaticus inasmuch as it is apparently non infective and is not associated with attacks of erysipelatous swelling.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib iv Proœmium.

LONDON HOSPITAL

A CASE OF ADDISON'S DISEASE IN WHICH THE BLOOD-PRESSURE WAS TAKEN TWO DAYS BEFORE DEATH

(Under the care of Dr CHARLEWOOD TURNER)

THE great value of Hill and Barnard's sphygmometer is that by its use a numerical value can be given to the arterial tension in any case, and it is thus much easier to compare the tension with that in other cases or with the tension in the same case at another time The great reduction from 120 to 73 mm of mercury is very striking As to the value of suprarenal feeding in Addison's disease a certain number of patients receive much benefit, others for a time improve, while in most of the cases hardly any improvement follows Sydney Ringer and A G Phear have collected the cases in which this treatment was followed [1] For the notes of the case we are indebted to Mr Reginald Wilson and Mr Harold L Barnard

A man, aged 53 years, was admitted to the London Hospital complaining of extreme weakness without wasting For two years he had been suffering from progressive loss of strength, but he had kept at his work until a fortnight before admission, when he was compelled to give in and take to his bed In addition to the extreme debility and the irresistible desire to lie down he complained of frontal headache and vertigo associated with nausea and vomiting on several occasions and loss of appetite His head would swim at times so that he had to grasp some support to prevent his falling and he always felt drowsy although he did not sleep well at night. He was quite clear that he had not lost flesh at all nor had he suffered from actual syncope For three weeks he had been constipated and had a burning pain about the anus upon defecation the result of a fissure of recent origin He had also had difficulty in micturition for the last few months and had to get up four or five times each night to micturate, the quantity of urine was subnormal, the specific gravity being low There was no urethral trouble

As he lay in bed the patient seemed to be in fair condition, his eyes were bright and his face was not wasted There was no anæmia of the mucous membranes His muscles were well developed and fairly firm, but very feeble in their action His grip was weak. His skin was perhaps a little brown and, this was rather more marked over his left elbow, but there was no excessive pigmentation at points of pressure. On examining his mouth, however, small spots of brownish pigment were seen all over the palate and the mucous membrane of the cheeks was affected with an almost black staining, while that of the lips was of a bluish black colour The area of cardiac dulness was diminished and the heart's impulse was scarcely perceptible, whilst the heart

[1] Transactions of the Clinical Society of London, vol. xxix. p. 63.

sounds were nearly inaudible The radial pulse was regular and beat 80 times a minute, but it was very easily compressible and its impulse was exceedingly weak The examination of the lungs, abdomen, and nervous system revealed nothing abnormal nor was there any evidence of the presence of a new growth The urine contained no melanin and the fundi were normal

The treatment consisted of laxatives and hypnotics until three days before his decease, when the glycerine extract of one sheep's suprarenal was administered The vascular condition was not appreciably improved and the patient was very sick Frequently repeated injections of small quantities of strychnine and ergotin with morphia were then tried without any permanent beneficial result and the patient sank very rapidly at the last Two days before his decease the blood pressure of the brachial artery was ascertained by the Hill and Barnard sphygmometer It was found to be only 73 millimetres of mercury and the oscillations of the pulse were very feeble (The blood pressure of normal men at rest varies between 100 and 125 mm Hg)

Remarks by Mr WILSON *and* Mr BARNARD —The above case is reported because we believe that it is the first in which the actual blood pressure has been recorded in Addison's disease It is a matter of regret that a wish expressed by the patient prevented the diagnosis being confirmed by necropsy, but there can be little doubt that this was a genuine case of Addison's disease, as the above abstract shows

BRISTOL ROYAL INFIRMARY

A CASE OF DIPHTHERIA IN WHICH DEATH RESULTED FROM A CLOT IN THE BASILAR ARTERY

(Under the care of Dr F H. EDGEWORTH)

THE slight attachment of the clot in the basilar artery in the case recorded below is very suggestive that the coagulum had formed elsewhere and had been brought to the basilar artery by the blood stream and the chief interest in this very rare case is the situation in which the embolus had been arrested If a clot be able to traverse a vertebral artery it is exceedingly unlikely to be stopped when attempting to enter one of the posterior cerebral arteries The absence of a discoverable source for the embolus is not of itself of very great importance Embolism in diphtheria is not very rare, but, as in other cases, the middle cerebral is the artery most commonly affected The interference with the cerebral circulation which would result from blocking of the basilar artery is quite sufficient to cause death

A boy aged nine years, was admitted to the Bristol Royal Infirmary on August 7th, 1898, complaining of swelling of the right side of the neck, sore throat, and pain on swallowing The illness had begun four days previously On examination it was found that the fauces were red and slightly swollen and that there was a patch of whitish-grey membrane on the right tonsil and right side of the uvula. The heart, lungs, and abdomen were normal, the urine contained a small quantity of albumin The temperature was 100° F The diagnosis of diphtheria was fairly obvious and this was subsequently confirmed by bacteriological investigation 1000 units of diphtheria antitoxin were immediately injected and 5000 more units were injected in the course of the next four days The patch of membrane gradually cleared off no other parts of the throat became affected, and the patient appeared to be going on well though the temperature remained high being between 100° and 101° On the 12th (five days after admission) a slight patch of consolidation was discovered at the apex of the upper lobe of the right lung This persisted until death. On the 16th (nine days after admission) a slight nasal twang in the voice was apparent, though fluids did not regurgitate, and on inspection there was no obvious paralysis of the palate On the 20th, however, paralysis of the right side of the palate was well marked both as regarded movement and sensation, the left side of the palate remaining intact Two days later there was some impairment of the left side also The knee-jerks were still present But for this paralysis the patient seemed to be better though the urine still contained a little albumin and the patch of consolidated lung had not cleared up The boy took his food well, fluids did not regurgitate through the nose and the action of the heart was well maintained From that time onward the patient did not seem to be so well, there were no fresh symptoms or physical signs, nothing that one could definitely point to, and yet it was easy to see that the boy was worse On the 27th (20 days after admission) the patient at 12.30 P M vomited his dinner which he had taken half an hour previously Some of the food came through the nose and some entered the larynx and caused a good deal of coughing and choking After this he was somewhat collapsed, lying with his legs doubled up and whining and crying At 8 1 M he suddenly passed into a state of opisthotonos which became so marked that at 9 P M there was a distance of only nine inches between the occiput and the sacrum The limbs were extended, the hands were clenched, and all the muscles except those of the face were in a state of continuous tonic spasm with occasional slight twitching All the reflexes were exaggerated This condition of tonic spasm gradually lessened though it did not altogether pass off The temperature gradually rose and at 1 A.M next morning death ensued, apparently from failure of the heart, the temperature being 106°

Necropsy —At the post mortem examination the apex of the upper lobe of the right lung was found to be collapsed, but the lungs were otherwise normal The heart was normal, there was no endocarditis and there was not the slightest trace of ante mortem clotting in the cavities (including the left auricular appendix) of the heart The abdominal viscera were normal On examining the brain a clot was found in the upper half inch of the basilar artery, projecting at its upper end into the openings of the posterior cerebral arteries The clot was firm, slightly decolourised and not adherent to the vessel wall which was normal Behind this clot was a little soft red post-mortem clot No other lesion was discovered in the brain or in its blood vessels

Remarks by Dr EDGEWORTH —This curious case is difficult to explain At first it seemed to be an ordinary one of diphtheria The antitoxin treatment had a good influence on the membrane which did not extend and rapidly cleared off The paralysis of the palate, though ultimately affecting both sides, began and was always most marked on the right side—i e, that on which the membrane had been This is not an uncommon feature and not difficult of explanation on the accepted view that the diphtheritic poison is produced at the infected area The chief problem is the nature and causation of the terminal phenomena The clot in the basilar artery might have been due to either thrombosis or embolism The facts in favour of the latter theory are the character and position of the clot and the healthy state of the wall of the vessel. Thrombosis at such a site seems improbable seeing that no thrombosis was discovered in those parts of the cerebral arteries where the blood current is slower than in the basilar artery On the other hand, no source of an embolus was found Whatever the cause of the clot death was almost certainly due to its presence

It is well known that convulsions may result, though infrequently, from an obstruction of the basilar artery, whilst rigidity or clonic spasm in the arms and legs is much less common than in hæmorrhage into the pons The characteristic of this case was that the spasm was tonic and involved all the muscles except those of the face, so that opisthotonos and extension of the limbs resulted Such tonic spasm from obstruction of the basilar artery seems quite exceptional Embolism of the basilar artery as a sequel of diphtheria has not hitherto been recorded Many cases of cerebral hemiplegia following diphtheria are to be found in medical journals[1] and have been attributed to embolism, thrombosis, or hæmorrhage, but as the majority have recovered the diagnosis has mostly been a matter of inference only Apparently the only case in which embolism of a cerebral artery following diphtheria has been found at a necropsy is that recorded by Gee and Abercrombie[2] in which, on the sixteenth day after the onset of diphtheria, left hemiplegia suddenly occurred, death took place 11 days afterwards from paralysis of the intercostal muscles The post mortem examination disclosed an embolus in the right middle cerebral artery, infarctions of the spleen and kidney and slight thickening of the edge of the mitral valve but no clot in the heart. It is, perhaps, worthy of remark that in those cases of right hemiplegia and aphasia immediately following diphtheria which had been attributed to embolism (but in which death did not occur) no cardiac murmur was discovered It can therefore be a conjecture only that such cases and also the one recorded above are due to clotting of blood in the left side of the heart, possibly in the appendix of the left auricle.

[1] 30 such cases are collected by Thomas: American Journal of the Medical Sciences, 1896, vol. cxi., p. 384

[2] Medical Times and Gazette, 1882, vol. ii., p. 378.

Medical Societies.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY — An ordinary meeting of this society was held at 20, Hanover square, W, on June 1st, the President, Dr R Fortescue Fox (Strathpeffer Spa), being in the chair —Mr H Shirley Jones read a paper on the Treatment of Neuritis and Neuralgia by the Droitwich Brine Baths He said he considered obstinate neuralgia and neuritis for the most part associated with, and dependent upon, a debilitated condition and believed gouty neuralgia to be more the result of weakness than the effect of any uric acid on the nerve itself The nerve most affected was the sciatic for obvious reasons, for it was the most difficult nerve to rest and the large surface over which it extended rendered it more prone to injury from cold, &c Next in frequency was, perhaps, the fifth Obstinate cases of neuralgia were met with accompanying malignant diseases He had seen also three cases of sciatica following the apparently successful removal of mammary carcinoma which would only admit of very temporary relief, each patient died within two years of onset without any material benefit or any evidence of return of malignant disease He related three cases of intense neuritis leading to insanity —Dr Douglas Kerr (Bath) said he could testify to the benefit which he had known in severe cases of neuralgia from the Droitwich bath treatment He asked Mr Shirley Jones for particulars of treatment —The President remarked that neuralgia in its various forms was usually relieved under balneological treatment It acted doubtless as an eliminant and also tended to remove the sub-inflammatory conditions on which most cases of neuralgia depended He also called attention to the use of cold douches for neuralgia by the French — Mr Bowen Davies (Llandrindod Wells) asked for further particulars of the methods of treatment at Droitwich — Mr Shirley Jones, in reply, said that he had chosen that subject as being of interest because he thought that more brilliant results were obtained from these waters in cases of neuralgia and neuritis than in any other disease The cases of neuritis which he had mentioned showed a peculiar obstinacy and each led to a very unusual complication—viz, insanity The treatment he adopted at Droitwich in neuralgia and neuritis consisted for the most part for acute cases in the use of a hot reclining bath without massage or electricity but with as complete rest as possible, in cases of the lower limb rest in the recumbent position, for the upper limb rest in a sling, and in uncomplicated cases no drugs at all For the relief of pain he used hot brine as a compress As the acute stages passed off the douche over the course of the nerve came into use, the temperature and the length of time varied considerably with the amount of pain and the idiosyncrasies of the patient, the temperature of the douche being from 115° to 80° F usually, and he had occasionally found great benefit from a temperature as low as 65° given as a douche, particularly in cases where there had been atrophy of muscles resulting from a neuritis, there, too, he found great benefit from the use of the swimming bath, where, owing to the great buoyancy of the water, exercise of any limb might be effected with a minimum of exertion, and this he thought a very important point in the development of atrophied muscles, apart from that the swimming bath had a very decided tonic effect and as such was very useful in the treatment of chronic neuralgia —A paper written by Dr Ivor Murray was then read on Scarborough as a Health Resort in Phthisis

ISLINGTON MEDICAL SOCIETY —A meeting of this society was held at 25, Highbury place on May 16th — Mr Arbuthnot Lane read a paper on the Pathology and Treatment of Adenoids He pointed out that the term "adenoids" was applied to an enlargement of the lymphatic tissue described in anatomical works as the pharyngeal tonsil and that from its proximity to the posterior nares and Eustachian tubes it readily interfered with their functions, and the operation for its removal was advised with the object of [illegible] these apertures Years had now elapsed since he [illegible] that the hypertrophy of the pharyngeal tonsil an inflammation of a lymphatic tissue consequent [illegible]tion of an area the lymphatics of which drain the removal of the secondary infection [illegible]ect and not with the primary source of trouble He also recognised that the naso-pharyngeal sequence was but an accidental consequence of a general condition which occurred in children possessed of little vitality resulting from an imperfect respiratory capacity in the first instance On this ground he attacked the primary infection of the naso-pharynx, expecting that its disappearance would in time be followed by a return to their normal condition of the pharyngeal, faucial, and cervical lymphatic glands, as well as by a normal development of the naso-pharynx, which was always imperfectly developed in chronic cases because the forced draught of respired air through the cavity had been in abeyance He effected this by improving the vital capacity by regular respiratory exercises, all inspired and expired air being driven through the nasal cavities, the mouth being kept closed This treatment met with complete success, so that he found himself now but rarely called on to operate for adenoids He called attention to the fact that the same class of children constantly assumed the several attitudes of rest—namely, the symmetrical and asymmetrical resting postures of the trunk and abduction of the foot—conditions which, when they become fixed or exaggerated, are called by the names "dorsal excurvation" or "round shoulders," "lateral curvature" or "scoliosis" and "flat-foot," all of which terms he hoped would soon disappear from surgery He described and showed photographs which illustrated the several changes in the trunk which were consequent on respiratory incapacity and the various deficiencies in development of all the bones of the face which he found were directly dependent for their perfect form on the proper evolution of the naso pharynx under the influence of the forcible passage of air through this cavity in respiration

WEST LONDON MEDICO CHIRURGICAL SOCIETY — A clinical meeting of this society was held in the society's rooms at the West London Hospital on June 2nd, Dr S D Clippingdale, President, being in the chair —Mr McAdam Eccles showed a boy with a large Nævo lipomatous Tumour of the Forearm which had existed since birth The case was discussed by the President, Dr Leonard Dobson, Mr Rotheroe, Dr E P Paton, Mr C B Keetley, and Mr Neville Wood —Dr Leonard Dobson and Mr C B Keetley showed a young woman who had been successfully operated on for Gastric Ulcer three weeks previously The patient had suffered much pain for many months and was in no way better in spite of prolonged medical treatment Mr Keetley opened the abdomen and found near the œsophagus an ulcer which had become adherent to the diaphragm The adhesions were separated and the ulcer was scraped and closed The patient made a good recovery —The case was discussed by Mr Bidwell, Mr Neville Wood, and Dr Paton —Mr Bidwell showed (1) a child on whom he had operated for Tuberculous Peritonitis, and (2) a man on whom he had operated for Extensive Carcinoma of the Rectum —These cases were discussed by Dr Dobson

Reviews and Notices of Books.

A System of Medicine By Many Writers Edited by THOMAS CLIFFORD ALLBUTT, M A, M D Cantab, LL D Glasg, F R C P Lond, F R S, Regius Professor of Physic in the University of Cambridge Vol VI London Macmillan and Co 1899 Illustrated Pp 944 Price 25s net

THE medical profession will welcome the appearance of the sixth volume of Professor Clifford Allbutt's System of Medicine The preceding volumes have contained such excellent articles that the completion of the series is naturally anxiously looked for The present volume is in every way equal to its predecessors It contains articles on the circulatory system, diseases of muscles, and diseases of the nervous system

The first article is by Dr G Newton Pitt on Right-sided Valvular Diseases Cases of this kind are comparatively uncommon, and Dr Pitt had a difficult task to accomplish in considering them He has succeeded, however, in producing a most interesting and full account of the affections which may attack the valves of the right auricle

and ventricle, and most readers will probably be surprised that such a varied number have been recorded He first writes on "Pulmonary Incompetence," remarking that this is the rarest of the valvular lesions of the heart, only 17 cases having been noted in the post mortem room at Guy's Hospital out of 11 000 examinations during a period of 23 years. The total number of cases confirmed by necropsy which Dr Pitt has been able to collect is 89, besides some 30 cases which were not verified after death. The most common pathological condition met with was infective endocarditis, this being present in 57 of the cases

The subject of Pulmonary Stenosis is merely mentioned, as it is almost invariably congenital in origin and was fully described in vol. v p 703

Diseases of the Tricuspid Valves are described under five headings—(1) in which acute vegetations were found upon the valves, (2) the valvular cusps were thickened, (3) the cusps were affected with fungating endocarditis, (4) the cusps were incompetent, and (5) the tricuspid orifice was stenosed. This forms a convenient and practical classification The "safety valve action" of the tricuspid valve is duly commented on, it is of great importance in relieving the strain upon the heart on occasions of sudden exertion

The article on Angina Pectoris by Sir R. Douglas Powell is written in the usual lucid style of that authority, showing much originality of thought and a thorough knowledge of his subject in all its details—in fact, we may borrow a sentence which he uses in describing Heberden's work and say that "his description is a model of accuracy and lucid expression." Sir R Douglas Powell divides cases of angina pectoris into three groups (1) those cases in which the disease is a pure neurosis of the cardio-vascular system, a disturbance of the innervation of the systemic or pulmonary vessels, including sometimes the vessels of the heart itself, causing their spasmodic contraction and thus increasing the peripheral resistance to circulation, (2) another and graver class of cases in which there is the same mechanism of disturbed cardio-vascular innervation, but associated with it a diseased heart, and (3) a group of cases in which the heart itself is the primary seat of the painful and often fatal symptoms—these include those cases dependent on coronary narrowing The first group the author designates "angina pectoris vasomotoria, the second "angina pectoris gravior or secondary cardiac angina," and the third "primary cardiac angina." This classification is much to be preferred to the one commonly adopted—namely, "true angina pectoris" and "pseudo-angina pectoris," the last-named term being both unsuitable and unsound in its signification. The illustrative cases are well chosen and enable the reader more fully to understand the symptoms characteristic of each form.

Dr F T. Roberts writes on Diseases of the Mediastinum and Thymus Gland. We have already referred to the remarks on mediastinitis in a leading article on Chronic Mediastinitis which appeared in our columns on April 29th. The section on Intra thoracic New Growths is particularly interesting and the author has succeeded in compiling an admirable review of the subject which, added to his own experience, makes the article a valuable one. The clinical aspect of the subject is fully described in terms which leave no room for doubt as to the writer's meaning especially so in relation to diagnosis.

Under the heading Diseases of Blood vessels and Lymphatics are several contributions Thrombosis and Embolism, by Professor Welch, Phlebitis, by Mr. H. H. Clutton, Arterial Degenerations and Diseases, by Dr F W Mott, Aneurysm of the Aorta, by Professor Sir W T Gairdner, and Aneurysms of Arteries in the Abdomen by Dr Rolleston, the last named also contributes a paper on Diseases of the Lymphatic Vessels

One of the best articles in this volume is that on Aortic Aneurysm by Sir W T Gairdner It is characterised by a masterly knowledge of the subject and a manner of expressing his ideas which at once rivets the attention of the reader In speaking of the mechanical origin of aneurysms of the aorta the author points out that we have to deal with an exceedingly complicated problem and that while it is in a high degree reasonable to affirm that both continuous effort and sudden or violent strain or injury are in a very appreciable degree causes of aneurysm, the question of how far and at what stage in a particular case these causes have come into operation is often one of the utmost difficulty and complexity The symptomatic diagnosis is elaborately set forth and the actual value of certain symptoms are considered at length, these being pain, cardiac collapse, syncope, palpitation, cough, dyspnœa, laryngeal phenomena, hæmorrhage, and dysphagia Space will not permit us to comment further on this most valuable contribution, but both author and editor may be congratulated on its appearance

Under the section of Diseases of Muscles are four papers, one on Myositis, by Dr Batten; one on Myotonia Congenita (Thomsen's disease), by Dr Hale White, one on Idiopathic Muscular Atrophy and Hypertrophy, by Dr C E Beevor, and the last on Facial Hemiatrophy and Hemihypertrophy by Dr Aldren Turner

Diseases of the Nervous System are then commenced, the first article being by Mr Beyan Lewis on General Pathology of the Nervous System Our knowledge on this subject has so much increased during recent years that Mr Lewis had a hard task before him to select and describe the more important discoveries in the physiology and pathology of the nervous system This chapter requires careful and close reading but contains a large amount of information. He begins by describing the "neuron," the modern conception of which is that of a variously contoured protoplasmic centrum—the cell body enclosing a nucleus of relatively large size and a well defined nucleolus" The "axon" and the "dendrons" are then defined and the various parts of the cell structure described in detail. This arrangement is necessary as the terms are more freely used in medical literature than they were but are not fully understood by the majority of readers A general view is then taken of System Diseases, and we are told that "by this term we mean the exclusive implication of nerve tracts having a community of function of certain links in the chain of neurons which extend from the periphery to the brain cortex, or conversely" The expressions "higher level motor neurons," "motor neurons of the lower level," and 'combined system diseases' are also briefly explained.

Another excellent article is by Professor Sherrington and Dr. Sharkey on Tremor, Tendon Phenomenon, and Spasm, the former author being responsible for the physiological section and the latter for the clinical and pathological sections

Next follow articles on Trophoneuroses Neurotrophic Affections of Bones and Joints, by Dr. Turney, Neurotrophic Diseases of Soft Tissues, by Mr J. Hopkins, Adiposis Dolorosa, by the Editor, Raynaud's Disease and Erythromelalgia, both by Dr T. Barlow Want of space prevents us from commenting on the above, but they form a most valuable series of articles for reference

The next division is headed Diseases of the Nerves and contains the following articles Diseases of the Spinal Nerves, by Dr G A. Gibson and Dr R. A. Fleming, Multiple Symmetrical Peripheral Neuritis, by Dr Judson Bury; Trigeminal Neuralgia, by Dr Head, Diseases of the Cranial Nerves, by Dr Aldren Turner, and Medical Ophthalmology, by Mr Brudenell Carter The contribution on Diseases of the Spinal Nerves reflects the greatest credit on the

authors, they having condensed an immense amount of work into a comparatively small space The consideration of the subject (after a short introduction) is divided into two groups, one of a more general character containing the pathological and clinical features common to the different forms of disease, the other of a more special character

The subjects which fall under the head of "general features" are neuritis, tumours, pressure, and wounds, whilst under the "special section" are described the individual affections of the different nerves This division is a convenient one both for study and reference

Under the title "Diseases of the Spine" are two contributions—Diseases of the Vertebral Column, Tumours, and Compression Palsies, by Mr Victor Horsley, and Affections of the Spinal Meninges, by Dr J S Risien Russell Mr Horsley's paper, as might be expected coming from an author who has made the subject one of particular study, is full of valuable information but is essentially practical, a quality which the majority of those who consult the "System" appreciate above everything else

The last article in this volume, by Dr Risien Russell, also shows that much pains have been taken in its production and that the author has had a practical acquaintance with the diseases which he describes The main part of the paper is occupied by a consideration of the most important morbid conditions of the spinal meninges—(1) vascular disturbances, (2) inflammations, and (3) tumours of the meninges Dr Russell adds, however, "Besides these conditions there are certain morbid states which are only of interest from the pathologist's point of view and concern us but little as they give rise to no clinical manifestations by which they can be recognised or which call for treatment" These are very wisely disposed of in comparatively few words

In conclusion, we must once more congratulate the editor, Professor Clifford Allbutt, on his choice of the authors and the manner in which they have fulfilled the duties entrusted to them

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Bad Nauheim Its Springs and Their Uses, &c By J GROEDEL, M D, Bad Nauheim Friedberg and Bad Nauheim Bindernagel 1899

THAT a second and enlarged edition of Dr Groedel's guide-book should be in demand within four years of the publication of the first edition shows that it has supplied a public need The statistical record of the growth of Nauheim as a watering place is an interesting study For the 30 years from 1855 to 1885 there was an average influx of between 4000 and 5000 visitors annually In 1890 the numbers had risen to over 8000, in 1895 to over 14,000, and in 1898 to over 19,000 persons This later era of "leaps and bounds" in prosperity coincides with its wide advertisement as a resort for the treatment of chronic heart disease The author, as one who has had a long experience of the use of the waters of Nauheim, is entitled to speak with authority on the subject The volume before us is at once a guide to the springs and their uses and to the town and the surrounding country easily accessible to the visitor To combine these objects satisfactorily is no easy task and one demanding considerable professional and general tact To attempt it, moreover, is to undertake a considerable responsibility Opinions must be well weighed and the limitations and dangers as well as the beneficial effects of the waters in question must be fairly set forth if a public ignorant of medicine and aware only of their sufferings are not to be misled or disappointed We consider that Dr Groedel has been very mindful of these difficulties and responsibilities and that he has acquitted himself of his task with much judgment and impartiality The section to which our readers will chiefly turn is that dealing with "the diseases for which Bad Nauheim is adapted and their treatment" We observe that while giving due prominence to the aqueous therapeutics of these maladies Dr Groedel has not been unmindful of the general treatment of disease based upon the principles of physiology and pathology which remain the same whatever the geographical position of the patient It is this circumstance which renders the physician himself not the least important factor in the efficacy of a given health resort The author states, however, with much truth, that excellent remedies applied at the homes of patients at times seem to require the additional sojourn at such a resting place as Nauheim to exercise their full force Nor is it surprising that this should be so The influence of a pleasant and invigorating watering place, far from the scene of the daily anxieties and the half performed duties of one enfeebled in health, is a potent factor for good. To all such influence the author gives due weight and with respect to the direct effect of the waters and climate of his own town writes with a conviction of their utility under appropriate circumstances and also with a commendable caution The work is written in English by the author himself and shows a good knowledge of our language Some idiomatic errors occur which are of no great moment and may be corrected in a later edition The book is well printed, is of a convenient size and affords useful information both to the professional and the lay reader

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The Thermal Waters of Bath By GILBERT A BANNATYNE, M D Glasg, M R C P Edin, Honorary Physician to the Royal Mineral Water Hospital, Bath, and to the Royal United Hospital, Bath Bristol John Wright and Co London Simpkin, Marshall, Hamilton, Kent, and Co, Limited 1899 Pp 87 Price 2s

THIS little volume gives a good account of the thermal waters of Bath, the appliances for their use and the diseases in which they are employed One feature of the book at once strikes the reader—viz, the very moderate tone in which it is written—it is not merely a "puff" of the city in which the author practises Bath is given its due meed of praise but no more This is as it should be and it is more likely to redound to the credit of the baths than exaggerated commendation The first chapter deals with the historical associations of the baths, with a brief consideration of the situation, the climate, and the general health statistics of Bath The second chapter is devoted to the source and origin of the waters and a comparison with other springs The author also gives some attention to the theory of the action of the waters and arrives at the conclusion that it is not to the presence of one or more particular mineral ingredients, except when they are found in large quantities, that the efficacy of any spring is due or because of which it is selected as a medicinal agent, but it is rather to the union of the several substances contained in the water and to its temperature that we may look for the benefit which the combined experience of those prescribing it and of those using it would teach us to expect. With this theory most spa physicians would probably agree It is because the "combination" in which the various mineral and gaseous constituents exist in such waters is unknown that we are unable to successfully imitate them and bring Bath, Homburg, or Nauheim to London In the third and fourth chapters will be found a clear and detailed description of the bathing establishments, stress being laid on the fact that they are open all the year round In describing the Aix massage douche baths he takes the opportunity of giving a short dissertation on massage and its uses In the chapter on the action of the baths in diseases in which the waters are of use the author again exhibits the thorough scientific knowledge which he possesses of hydro-therapeutics With regard to the diseases most satisfactorily treated by a course of the baths, gout and rheumatism of the

joints stand first, rheumatoid arthritis not yielding such a high percentage of "cured" or "relieved,' but still presenting good hopes of relief to those sufferers who have tried other methods in vain. The treatment of sciatica and lumbago gives a percentage of 92 8 "cured" or "relieved" We do not understand, however, why these two conditions should be bracketed together, for "lumbago" is usually regarded as a form of "muscular rheumatism' and not as a nervous affection

The work is evidently intended for the use of practitioners and not as a "guide book" and we can cordially recommend its perusal to our readers

LIBRARY TABLE

Annual and Analytical Cyclopædia of Practical Medicine By CHARLES E DE M SAJOUS, M D, and 100 Associate Editors Vol III Pp 600 Illustrated with chromolithographs, Engravings, and Maps Philadelphia, New York, and Chicago The F A Davis Company 1899 — We have already commented on the general objects and scope of this work in our reviews of the previous volumes The present volume commences with an article on Dislocations, and terminates with one on Infantile Myxœdema, better known in this country under the term "cretinism." All the papers are well written and are of such length as to enable the authors to give a fair amount of space to their subjects In certain instances, however, as when the pathogenesis is obscure or recent investigations have rendered more space desirable, writers have been allowed such latitude that their articles form valuable monographs Amongst such more extended contributions are the following the article already mentioned on Infantile Myxœdema, by Professor Osler and Dr Norton of Baltimore, Exophthalmic Goitre, by Professor Putnam of Boston, and Goitre, by Professor Adami of Montreal. From the numerous subjects appearing in this volume it is a little difficult to select any for special notice. To the surgeon the following will be of interest Dislocations and Fractures, by Professor Stimson and Dr Keyes, jun, of New York, Hip-joint Disease, by Dr Reginald H Sayre of New York, and Hernia, by Dr W B Coley of New York, whilst the attention of physicians will be more attracted by the papers on Dysentery, by Dr Flexner of Baltimore, on Gout, by Dr Levison of Copenhagen, on Eczema, by Professor Stelwagon of Philadelphia, on Hysteria and Hypnotism, by Professor Eskridge of Denver, and on Fatty Degeneration of the Heart, by Dr J M Anders of Philadelphia The contributions have all been well brought up to date, the literature of 1896-98 being freely referred to

The Medical Annual and Practitioner's Index. Work of Reference for Medical Practitioners Seventeenth year Bristol John Wright and Co 8vo Pp 734 Price 7s 6d net.—For 17 years this useful annual has appeared, and although the first volumes were good the later volumes have been even better, so that at present the book can be accepted as a trustworthy record of the advances made in medicine, surgery, and gynæcology during the past year Every year it must become increasingly difficult to compress into a reasonable compass the vast amount of fresh information which accumulates unceasingly The work deals with advances not only in treatment, though this has most space allotted to it, but also in etiology and diagnosis, and the names of the contributors guarantee the trustworthiness of the information supplied, and as the sources are quoted the reader knows where to refer should he need further information. Numerous illustrations, both plain and coloured, assist the text and the printing and paper are all that could be desired The series of plates illustrative of those bacteria which are pathogenic in the human subject which was commenced in the volume for 1898 is completed in the present volume, it has been prepared by Mr S G Shattock and is excellent This work should prove of especial benefit to those who are in general practice, for it gives them the most recent information and it will often provide a suggestion for treatment at the very moment when it is needed There are useful appendices on recent legal decisions affecting medical men, on new medical appliances, and lists of new books and of asylums and inebriate homes There is also an index to life insurance offices and in each case is given the amount of premium for insuring £100 at 30, 40, and 50 years of age

The Hygiene of the Mouth By R DENISON PEDLEY London J P Segg and Co Philadelphia, U S A S S W Dental Manufacturing Co Pp 93 Illustrated Price 2s 6d —The object of this little volume is to show how dental disease may be controlled and in a large measure prevented It is somewhat difficult to discover for what class of readers the book is intended Some portions are well worthy the attention of those specially engaged in medical work, while in many portions the elementary character of the information would serve to indicate that the book is intended for the lay reader Still, anyone not actually engaged in dental practice will gather much useful information from the little work and if it only helps to teach in a small way the importance of maintaining the mouth in a healthy condition it will not have been written in vain We may say that in the "get up" of the book there is room for considerable improvement

JOURNALS

Annales de Gynécologie et d'Obstétrique May, 1899 Paris G Steinheil —This number contains the following original articles the Treatment of Uterine Cancer by Total Abdominal Hysterectomy, by MM L Picqué and P Mauclaire, the Vascular Ligaments of the Uterus, by M Pierre Fredet, and the Employment of Steam in Gynæcology and Obstetrics, by Dr R Labusquière A review is given of the thesis by Dr Ch Lefèvre, on a Common Form of Sterility in the Female An account of the proceedings of various gynæcological and obstetrical societies and the usual bibliography conclude the number

New Inventions.

AN ADJUSTABLE READING DESK

THIS desk consists of a board measuring 11 inches by 13 inches provided with three props or supports which enable it to stand securely in a sloping position at any angle that may be desired by the reader The attachments of these supports occupy one side of the board and on the other side there is a T shaped book-holder pivoted on a short brass rod passing through the centre of the board. The book holder can be turned in any direction round this pivot and can be clamped at any point so that the book may be either in the usual upright position or may be placed so as to be conveniently read by a person lying on his side, in which case it is fixed to the book holder by two cords passing inside the covers and the pages are held open by brass hooks The desk has in fact been designed for use by students, invalids, and others who are desirous of reading when lying on the side in bed or elsewhere It is no less useful for readers seated at a table in the ordinary way, as the book is conveniently supported and held open Provisional protection has been taken out for the desk, and it may be obtained from Mr E H B Hughes, Rowlands Hey, Sea Bank road, Liscard, Cheshire.

THE LANCET.

LONDON SATURDAY, JUNE 10, 1899

THE celebration of the centenary of the Royal Institution is an interesting historic as well as scientific event During the period of its existence the achievements and progress of science have been unprecedented It would not be correct to say that the whole fruits of scientific research in this country have been due to the work done in the Royal Institution, but there can be little doubt of the great good and influence which the foundation of the Institution has exerted upon educational progress Whatever may have been the primary objects of the foundation of the Institution, it has since fulfilled a most worthy and admirable function in serving as a means of promulgating exact knowledge amongst the people It has served, in short, as a connecting link between the people and the profound scientific thinker and investigator. Nor has this position been reached at the sacrifice of the best traditions and aims of the Institution, for although at one time it threatened to become the mere playground of science the demonstrations held within its walls have stirred up in some who deemed it fashionable to attend the lectures in its early days a spirit either to go on with the work of unravelling Nature's mysteries or else to assist materially the funds of the Institution so that others might be enabled to carry on that work which plays no unimportant part in the welfare of the nation Where else can the people go who are interested in seeing and understanding the recent developments of scientific research and who have a natural yearning to comprehend its import and to be in a position to speculate upon the probable application of discoveries to commerce, to hygiene, and even it may be to the preservation of peace? Of those, for example, who attended the lectures of that brilliant investigator and exponent, MICHAEL FARADAY, it is probable that many foresaw how important the application of his delightfully simple and lucid experiments and demonstrations was likely to be in the affairs of the civilised world For in those experiments were the elements of modern lighting by electricity and of human communication by telephony and by telegraphy Many will remember the apparently simple experiment which has since proved so momentous—the revolution of a metal disc opposite the poles of a magnet giving rise to an electric current The same experiment has been a million times repeated on a practical scale and to-day it finds illustration in the powerful dynamo upon which we depend at present as the best source of energy for the production of the electric light For 50 years FARADAY laboured within the walls of the Royal Institution and his labours are a tribute to its founders and a monument to his genius.

The Royal Institution was founded by Sir BENJAMIN THOMPSON, better known as Count RUMFORD, in 1799 himself a prolific contributor to our knowledge of physical laws Count RUMFORD, however, was not long at the Royal Institution and at the time when he left the revenue was so low as to threaten an untimely end to the foundation Odd as it may appear, the Institution was saved by people of a purely business instinct, whose avowed object was to "run" the Institution on somewhat commercial lines and to bring scientific experiments to the fore as a fashionable sort of thing to talk about This may have been a derogatory procedure from the point of view of pure science, but it succeeded in preserving the Royal Institution for uses that proved far from base It was at about this critical juncture in the history of the Royal Institution that Sir HUMPHRY DAVY commenced his duties as a professor there, with what result is well known Young DAVY was a surgeon's assistant, but his bent was towards chemistry and physics, on which subjects he proved himself an able investigator during his engagement at the Pneumatic Institution at Bristol which he joined soon after its foundation It was here that he discovered the anæsthetic properties of nitrous oxide, but his most memorable work was done in the Royal Institution where he isolated the metals of the alkalies and alkaline earths by the galvanic current Sir HUMPHRY DAVY did probably more than any of his contemporaries to awaken the public interest in the application of chemistry to technical industries and daily life It is pleasing to record that the nobility and poetry of Sir HUMPHRY DAVY'S nature are shown in his writings and in his beautiful relations with FARADAY who succeeded him The work of FARADAY has since been carried on by men who are happily amongst us at the present day It was in the Royal Institution for example, that Sir EDWARD FRANKLAND carried on that classic research on organometallic compounds which led to the theory of types and which has since proved a solid basis for that huge superstructure now known as organic chemistry Distinguished chemists like Dr ODLING and Dr GLADSTONE also occupied the same professorship until in 1877 the present holder of the chair, Professor DEWAR, was appointed The chair is known as the Fullerian Professorship and was founded by JOHN FULLER in 1833 This was the first substantial endowment to the Royal Institution, the sum of £10,000 being disbursed in maintaining a chair of chemistry and physiology and the balance used as a reserve fund

Professor DEWAR'S splendid researches and results in the liquefaction of gases are well known and are of historic interest since this work was really commenced by FARADAY. With what admiration would FARADAY have witnessed the liquefaction of air, fluorine, helion, argon, and hydrogen, and how profoundly impressed he would have been with the triumph, coming as a sequel of the researches which he had begun, the conversion of all known gases under the combined influence of high pressure and low temperature to the state of liquid and incidentally in some cases of solid Of the distinguished physicists who successfully devoted much of their time to research at the Institution must be mentioned that arch experimentalist and exponent JOHN TYNDALL He was succeeded by Lord RAYLEIGH, an able mathematician whose name has become recently familiar to the world by his observation of the

abnormality shown in the density of the nitrogen of the air—an observation which, with the assistance of Professor RAMSAY, led to the recognition and isolation of a new element, argon This discovery marked an epoch in the history of both chemistry and astronomy It has opened up an enormously wide field for conjecture and research and has already been prolific in yielding fruitful results The last event of importance in the just closed century's history of the Royal Institution is the munificent bequest made by Mr LUDWIG MOND in 1896 which provides for a permanently endowed DAVY FARADAY Research Laboratory which is thoroughly equipped for the prosecution of research by all qualified workers who choose to apply The actual centenary date of the founding of the Royal Institution was last Monday, June 5th, on which occasion the PRINCE OF WALES presided over a banquet held at the Merchant Taylors' Hall and during the week commemoration lectures were delivered by Lord RAYLEIGH and Professor DEWAR, while a reception fully in keeping with the importance of the occasion was held by the Lord Mayor and was attended by a very distinguished company of scientific workers including foreign savants

It will be admitted that the history of the Royal Institution is full of interest. Its existence from its foundation has had much in common with human career It was at first devoted to a mission which failed it was threatened again and again with extinction from the want of material support, nevertheless it has come out triumphant, as an institution with worthy objects and with praiseworthy results, and has been sustained financially in order to carry on its excellent work by those generous and rich men who have been moved by, and convinced of, the real educational and progressive work which it has done and continues to do The Royal Institution affords a striking illustration of that proud characteristic of the English nation which prompts it to support all that claims to be philanthropic and devoted to the best interests of the community and this apart altogether from State aid. It has been said that the Germans are a long way ahead of us as a nation in the application of science to manufacture and industry That may be so, but in regard to original research and the wealth of results therefrom England still holds, and proudly holds, the first position and this she has attained and maintains by voluntary support The Royal Institution is a leading and a noble instance of the sincerity of this national characteristic and the dawn of its second century will doubtless bring, as we confidently anticipate, further encouragement and stimulus to carry on its excellent work and purposes

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WE have received a copy of the interesting report which Dr HOPE has recently presented to his sanitary authority on the health of the city of Liverpool in the year 1898—a document which extends to 217 closely printed pages and is full of valuable information concerning the sanitary condition of that city, with special reference to the steps which, under Dr HOPE'S guidance, the corporation has taken for its improvement With the general details of sanitary administration, local birth and death rates, &c, as set forth in the report, we shall deal on another occasion. We here limit our remarks to one only among the many important matters which are treated of in its pages

To the medical officer of health the difficulty—we had almost said the impossibility—of obtaining an accurate measure of the healthiness or the reverse of the people under his jurisdiction is one of the most embarrassing of the many obstacles which still retard progress in practical sanitation The local registrars, for the most part, supply fairly accurate returns of the deaths occurring from time to time in their districts, but when these have been duly abstracted by the health officer and properly distributed so as to allow for mortality in public institutions there remains the almost insuperable difficulty of ascertaining, even approximately, the populations upon which these deaths have to be calculated in order to furnish trustworthy statements of mortality or, as they are commonly termed, rates of death per 1000 living It is needless to point out that this difficulty increases year by year as the census becomes more remote. On Dr HOPE'S authority we learn that this difficulty has become exceptionally great in Liverpool where, either because of the recent enlargement of the city or for other reasons specified in his report, the population of the city as at present constituted is, in his judgment considerably understated in the published returns of the Registrar General Dr HOPE further complains that having himself applied to certain small municipal areas of Liverpool the method which the Registrar General employs for the estimation of the populations of some of the larger urban centres in their entirety, he obtains populations which make the birth- and death rates of those areas appear enormous, a result especially deplorable because these are the very districts in which Dr HOPE has succeeded in securing the largest amount of structural improvement by the sanitary authority, and he is not unnaturally disappointed to find that, on applying the only available test, the death-rate, he is unable to demonstrate such an amount of amendment as might have been hoped for after the large expenditure which has been incurred on account of demolitions and alterations of insanitary property With regard to the method adopted at Somerset House in estimating the populations of the great English towns there is no mystery whatever Except in special cases, to which reference will presently be made, it is the practice of the Registrar General to assume that the same annual rate of growth of population which is known to have prevailed in each town during the 10 years intervening between the last two censuses has continued uninterruptedly since that period. Accordingly, a proportionate addition is made annually to the population of each town and the number so obtained is taken to represent the population at the middle of each year In certain instances, however, special circumstances have arisen locally which have interfered with the uniform movement of the population; and in such cases the Registrar-General has usually been willing to consider local representations to that effect, and in suitable cases where returns of inhabited houses have been forthcoming to revise the estimates of population of particular towns for which the estimates framed in the usual way have been shown to be erroneous We know of instances in which this has been done, and it is probable that in the case of Liverpool referred to in Dr HOPE'S report a similar

course would have been pursued about the middle of the last intercensal period had the necessary particulars from the rate-books been supplied to the central office

We are very glad to recognise the ability and zeal which Dr HOPE has for many years displayed in his attempts to improve the sanitary condition of the vast population of Liverpool, but we are confident that he errs in thinking that the immediate remedy which he suggests to meet his own special case would be suitable for general adoption If we correctly understand Dr HOPE'S proposal it is this—that the Registrar General should issue official estimates, even at this long distance from the census, for each of the 11 municipal subdivisions of Liverpool, the population of which ranges from about 16,000 upwards Statisticians are, however, agreed as to the impracticability of estimating prospectively the population of small districts on the assumption of a constant rate of increase or decrease, and for periods as far remote as the present from the census the attempt to do so would be absurd At any rate, it is the fact that the Registrar General has always consistently refused to estimate for anything short of the entire populations of urban districts and in so doing we think that he has acted wisely Having regard to the exceeding length of the interval between successive census enumerations it is beyond question that the method of the Registrar General has hitherto given results which are in most cases satisfactory, and under existing circumstances we know of no other plan which would be likely to prove superior It has frequently been contended in these columns that the difficulty which besets Dr HOPE and his colleagues in the public health service will never be surmounted except by a more frequent numbering of the people We therefore agree with him in advocating recourse to a quinquennial census for the whole country, simple in character and similar to that which has been established by recent legislation for the metropolis This course has recently been urged on the President of the Local Government Board by the Council of the Royal Statistical Society and we are of opinion that the expense inseparable from a more frequent enumeration should no longer be permitted to stand in the way of social and sanitary reforms which are believed to be necessary by those who have the best title to be heard

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THE work of the London medical societies for the year 1898–99 is now approaching its close and indeed several of these learned bodies have already discontinued their sessions until October next The time therefore seems opportune to draw a moral from the experiences of the past year And let us start by saying that it would be difficult to exaggerate the value of our medical societies not only to the London medical man but to his brother of the provinces The work which they do and the careful way in which they do it alike excite our admiration They stimulate young members of the profession and they enable the older ones to see the drift of new light and new investigation Their importance is universally recognised They are no longer the monopoly of the metropolis and of its central parts, but they are to be found in every provincial town of any size A casual visitor from London at one of the meetings of a provincial medical society—say, at Newcastle, Leeds, Nottingham, Manchester, or Liverpool—is apt to be astonished when he considers the cases which are brought forward and the skill with which they are diagnosed, treated, and discussed There may or there may not be room for a post-graduate school in London and in other large and central towns, but undoubtedly the chief post-graduate education which medical practitioners get is in the medical societies and in the medical journals which devote an ever increasing amount of space to the reports of their proceedings We have said enough to show that we write in no depreciative spirit of the medical societies and that we desire to promote only their increased usefulness and support. But there exist as regards such societies certain defects to which we wish to call attention

For one thing, in the London medical societies we should desire to see a larger attendance Even in the best societies and on what may be called field nights the numbers are disproportionate to the importance of the papers and to the time and trouble which have been spent by the gentlemen who have prepared them for the consideration of the society This is partly due doubtless to medical journalism. Members of the profession know that in their medical paper they will find the chief points of all the communications recorded with faithfulness and accuracy Still, we cannot think this explanation altogether satisfactory There are two kinds of absentees at the London societies The first consists of the older and more eminent members of the society who having filled all the offices and attained a success in practice which leaves them little leisure are apt to prefer their own firesides when it is time to go to the society It is hard to blame them But even they would be a little more frequent in their attendance if they knew how their presence is appreciated and how pleasant it is to the members generally to hear the cases and the conclusions of younger colleagues discussed in the light of a longer and a larger experience The disappearance of past presidents and honorary secretaries is often painfully abrupt and complete, as if the efforts of office had exhausted alike their energy and their interest in the society which they serve so well for two or three years Perhaps the only cure for this defect of our metropolitan societies would be a diminution in their number It is not in human nature to attend medical societies every night in the week and such attendance cannot be given in these busy days without serious neglect of other duties Even if it could, the benefit would be very questionable No professional man does well to act as if his profession covered all truth and duty It is well for him to seek the society of men of other professions than his own and to give as much of his evening time to domestic duties as can well be spared Clearly if the number of our medical societies were greatly reduced it would be more possible for busy men to attend with comparative regularity without encroaching on time necessary for the other large duties of life in this busy age

The other noteworthy absentees from our metropolitan medical societies are the great body of general practitioners Many explanations of this fact may be given The duties of general practice are not over so soon or so

definitely as those of the consulting practitioner They are often as hindering in the evening as in the morning Another reason is to be found in the great multiplication of local societies It is remarkable, as we have said, to what an extent this process has gone, so that in some suburbs there are two or three medical societies which are easy to reach and the proceedings at which are a little more social and less formal than those of the more central societies It has appeared to some critics that our great societies are a trifle too strict and formal in their style and that they are open to the charge of dealing too exclusively with rare cases and difficult subjects They abstain too severely from discussing those questions which deeply concern the rank and file of the profession and which affect the dignity and the reputation of medical practice The removal of a stomach, the suturing of a heart, or the cure of an abdominal aneurysm are, no doubt, great feats, but they are of rare occurrence and constitute but a fraction of the work of medicine They do not appeal to the general practitioner so much as the treatment of influenza or pneumonia, the pathology of headache, or the treatment of infantile diarrhœa To this class of practitioner, too, there seems to be in the larger medical societies a serious want of interest in the evils which affect medical practice—such, for example, as hospital abuse An enormous amount of good might be done by instituting an occasional social evening when men of all grades of practice might unbend and discuss with each other in informal ways the problems of medical life among the poor with a joint view to their welfare and to the dignity and efficiency of medical practice. The sum of what we have said is this—that medical societies are amongst the best agencies in the profession, but that they could be made more useful and more attractive by becoming newer and by such an occasional relaxation of their severity as would bring them into touch with the whole medical profession and the whole experience of medical life

Annotations.

"Ne quid nimis."

THE BIRTHDAY HONOURS AND THE MEDICAL PROFESSION

THE birthday honours contrary to general expectation, are neither numerous nor distributed with any special reference to the eightieth birthday of the Queen There is no great recognition of personal services to the Crown, there are no new Peers, no promotions in the Peerage, and no new Privy Councillors For the most part the honours were what may be called perfunctory, thatis, they take the form of advancement in the various orders of gentlemen already decorated Two eminent physiologists and a well known provincial surgeon are the only members of the medical profession who receive titular distinction Professor J S Burdon Sanderson, for many years Waynflete Professor of Physiology at Oxford and now Professor of Medicine at that University, becomes a baronet. Professor Michael Foster, the equally famous head of physiological learning at the sister University of Cambridge and secretary to the Royal Society, receives a K C B Mr William Mitchell Banks, the popular and able Liverpool surgeon, obtains the knighthood to which his excellent work as surgeon and teacher in Liverpool and as a representative of the Victoria University on the General Medical Council entitles him Surgeon General A A Gore, late Principal Medical Officer in India, receives a C B, and Lieutenant-Colonel W G King, I M S, a C I E

ROYAL COLLEGE OF SURGEONS OF ENGLAND

THE names of candidates for the vacancies in the Council of the Royal College of Surgeons of England must be sent to the Secretary not later than June 12th Any proposals to be placed on the agenda for the annual meeting of Fellows on July 6th must be sent to the Secretary by June 15th It will be remembered that in 1898 no quorum was formed at the January meeting of Fellows and therefore that meeting was abolished, yet no quorum was formed at the July meeting As only one meeting is to be held annually in future it is surely possible to obtain the attendance of the necessary 30 Fellows If repeated failures to obtain meetings occur the Council will not improbably decide to alter the by law under which the meetings are at present summoned

THE MEDICAL EDUCATION OF WOMEN

As several inquiries have reached us respecting the medical education of women the following information may be useful In the first place no woman ought to embark on the career of medicine without a reasonable certainty of having sufficient capital, not only to pay for her training and keep her during at least five years of student life, but also to support her for the first few years after qualifying Paid appointments for newly qualified medical women are few and far between To women who are being sent out under the auspices of some society to India or elsewhere and are certain of immediate employment this does not so much apply, but even in these cases it is very unwise for a girl to start as a medical student unless she is sure of sufficient money to keep her without doing outside work and to allow of a good yearly holiday during her period of study A medical student in her student days ought not to have time to earn anything towards her own support She should live well and be able to take good holidays without worry about money matters or her health will probably break down and she will be useless even if she succeeds in passing her examinations As regards age, 20 years is quite young enough to begin the medical portion of her training She should have a thoroughly good general education until she is 18 years of age, when she ought to be able to pass any of the preliminary Arts examinations required before she can proceed to her medical work The best of these Arts examinations from the medical students' point of view is the matriculation at the London University The next two years might be profitably employed in acquiring a thorough knowledge of French and German, preferably by residence abroad, and of drawing, skill in these three branches and some knowledge of the ways of the world would be of great value to her later She would then begin her medical work as a more or less accomplished and well educated woman and not as a raw schoolgirl The choice of a medical school depends in some measure on the degree or diploma which the student means to take The best medical qualification open to women is the degree of the University of London The best place of study for a woman who aims at the London degree is unquestionably the London Royal Free Hospital School of Medicine for Women This school admits women students only It is thoroughly well equipped in every department and its students receive full instruction in all subjects required in the medical examinations including the preliminary scientific at the London University The school, which was the first institution in the

eighth day the temperature suddenly rose to 104°, the features became immobile, and the eyes did not blink when the fingers were passed before them The pupils were widely dilated and almost insensible to light, the jaws were closed, there was grinding of the teeth, the head was retracted, and the upper limbs were rigid and extended The lower limbs were flexed The thighs, which were drawn up, were extended with ease when the child was lying down, but with difficulty when she was sitting (Kernig's sign) The respiration was irregular There were signs in the chest of recrudescence of the pneumonia The signs of meningitis increased, the child was unconscious, the pupils were large and insensitive to light, the stiffness of the neck increased, and the rigidity of the limbs was permanent The patient gradually recovered, the temperature became normal on the fifteenth day but the rigidity of the limbs persisted in some degree until the twenty fifth day M Rendu did not doubt that the pneumococcus was the cause of the otitis and adenitis in the first case The onset was identical in all three cases and was that of pneumonic invasion—a violent rigor, followed after some hours by marked pyrexia

THE WHITE LEAD INDUSTRY

SIX years ago a departmental committee was appointed by the then Secretary of State, Mr Asquith, to inquire amongst other things as to whether the special rules which existed with regard to the manufacture of white lead were sufficient and to suggest any precautions necessary with regard to the industries specified for the protection of life or health The committee was composed of several able men and their report, which was issued in a Parliamentary paper towards the end of 1893, contained a summary of suggestions and recommendations of great promise from the point of view of improving and protecting the health of the operatives while as little as possible interfering with the legitimate pursuit of an indispensable manufacture No serious State action appears, however, to have been taken to apply the recommendations of this committee, for last week the Home Secretary placed upon the table of the House of Commons, according to the *Times* of June 3rd, a paper containing 35 special rules which are proposed to be applied in future to all white lead factories, and these special rules embody the recommendations of Mr Asquith's Lead Committee with, however, some important additions The special rules affect occupier and employé alike The plans of all white lead factories which it is proposed in the future to construct are to be submitted to, and approved in writing by, the Chief Inspector of Factories Emphasis is very properly laid upon the necessity of keeping as far as possible, as was enjoined by Mr Asquith's committee, the machinery and chambers involved in the manufacture of white lead moist Similarly also occurs a recommendation to the effect that no woman should be employed in the white beds, the rollers, the wash becks, the stoves, or in packing dry white lead, and that these departments should be worked in future only by adult males We are glad to note that more stringent measures are to be imposed providing for more regular and systematic medical examination A duly qualified medical practitioner must be appointed for each factory and no person is to be employed in a lead process for more than a week at a time without a certificate of fitness granted after examination by the appointed surgeon Each employé is to be examined once a week and his suspension may be ordered by the surgeon whose sanction is further necessary before he can return to work Finally, when an employé complains of feeling unwell the occupier is bound instantly to give an order upon a duly qualified medical practitioner Certain duties are similarly to be imposed on the workers They are to present themselves regularly at appointed times for examination, they are to wear an overall suit and in some cases a respirator, they are to bathe regularly and wash in the lavatory before bathing, and, lastly, they are not allowed to smoke or use tobacco in any form or partake of food in any other but the properly appointed place In the main, therefore, the special rules which the Home Secretary has recently drawn up simply give effect to recommendations which were made some years ago As we have said, however, there are one or two amplifications and we trust that since sufficient time has elapsed to enable all the parties concerned to express an opinion upon the practicability of these recommendations the special rules will ere long be adopted and thus minimise, if not remove completely, the dangers incident to the manufacture of white lead

MEDICAL CERTIFICATES AND THE SCHOOL BOARD

A CORRESPONDENT writes from the country to ask the following question "Has the School Board the power to pay for certificates for non attendance at school due to sickness, and if so what fee do they allow the medical man?" We do not know whether a provincial School Board will be willing to consider the action of the London School Board as a leading case, but on Jan 21st, 1897, the following motion proposed by Mr Whiteley and seconded by Mr A. Riley was agreed to "That in cases where the magistrate or justices of the peace is or are dissatisfied with the medical certificate furnished, and in cases where the medical certificate is *primâ facie* unsatisfactory (and when the certificate is signed by a registered medical practitioner), the board's medical officer shall in the first instance communicate with the practitioner giving the certificate and in the event of such certificate being ultimately acted upon the fee of 2*s* 6*d* shall be paid by the board for the confirmation of such certificate " So far as we know payments made under this law have never been questioned by the auditor in auditing the accounts Therefore, it is plain that a school board has the power to pay a medical man a fee and if under one set of circumstances why not under others? If the London School Board can do so why not a rural board? They are both under the same master namely, the Education Department

THE MANCHESTER SEWAGE PROBLEM

THE Mersey and Irwell Joint Committee proceeded against the Manchester Corporation last week before Mr J M Yates, Q C, stipendiary, and other justices in the Manchester County Police Court "for knowingly permitting liquid sewage to be carried into the river Irwell and the Manchester Ship Canal contrary to the provisions of Part 2, Section 3, of the Mersey and Irwell Joint Committee Act, 1892" It appears that on July 25th, 1896, the first order of the court was made and the case had been dragging on ever since In November, 1898, the court ordered the corporation to establish sewage works within 12 months On Nov 26th, 1897, the corporation made a further application to the court for the order to be extended till March 25th, 1898, the case being adjourned till May 11th, when the application was dismissed Summonses were issued on May 17th, 1898, and on July 20th the court granted by consent a further adjournment for six months, and it was understood then that if the corporation would get a scheme approved by the Local Government Board penalties would not be asked for, and towards the end of that six months the Rivers Committee of the corporation received from three eminent experts a report showing that the bacteriological treatment would be efficacious An inquiry was subsequently held so as to enable the corporation to borrow

£160,000 to go on with the scheme, but on March 15th, 1899, the Manchester City Council failing to ratify the action of the committee sent back the proceedings of the Rivers Committee. The effluent was stated to be no better now than it was in 1896. After hearing evidence on both sides Mr Yates, in giving the decision of the magistrates, said that they were convinced that the corporation was seriously alive to the necessity of doing something to purify the vast volume of sewage from a population of 600,000 people, and a fine of £10 per day for each of the five days for which the summonses were taken out was inflicted with £50 costs No doubt there are and have been many difficulties in the way of the disposing of the sewage of a city like Manchester, still we cannot believe that they are unsurmountable

LONDON SCHOOL NURSES SOCIETY

THE first annual meeting of this society will be held at the offices of the London School Board, Victoria Embankment, on June 19th, when the Countess of Aberdeen will take the chair, and will be supported by Lord Reay, the Hon E Lyulph Stanley, Mr Brudenell Carter, and Miss Amy Hughes. The London School Nurses Society was formed with the object of supplying visiting nurses to elementary schools in poor districts and already three nurses visit some of the poorest schools and attend to the small ills of the scholars—such as sore heels and inflamed eyes—while watching for more serious conditions that would require treatment at the hands of the medical man Each nurse is able to visit four schools in one day and see about 100 children, who are sent to her one by one by the teachers As is pointed out by the secretary it will probably be difficult to impress on the public the importance of the work to be done or the necessity for these nurses, but it must be remembered that the sore heel soon becomes poisoned if left to London dirt, and that inflamed eyes often lose all power of seeing simply through neglect. There is no more sure way of securing the health of the people than to arrest small ills at the beginning and a nurse can often see at a glance whether a child should be sent to a medical man The cost of each school nurse is about £50 a year as her full time is not needed. The committee urgently appeal for subscription or donations, amounting at least to £300 a year, to enable them to carry on the work in Hoxton, Tower Hamlets, and Southwark, and to start three more nurses where they are most needed. All subscriptions should be sent to the Hon Treasurer at 89, Harley street, London, W

THE SALE OF FOOD AND DRUGS ACTS IN PRACTICE.

IT will be conceded that the experience gained from the collection and analysis of 14,000 samples secured under the Sale of Food and Drugs Act should afford some practical lessons. Such an experience is recorded by Dr Kaye, the medical officer of health of the West Riding County Council, Wakefield, in a paper which he read before the Yorkshire Branch of the Sanitary Inspectors' Association some weeks ago and which has since reached us in the form of a little pamphlet. The perusal of this paper is especially interesting at this time, when we may shortly expect a new Act Dr Kaye shows, as we have often shown, that the surest way to reduce the prevalence of fraudulent practices of adulteration is to take greater numbers of samples for analysis He further shows that, in particular, the adulteration of milk has diminished in accordance with an increased number of samples taken No opinion is ventured as to how far the Food and Drugs Act should be directed to the control of preservatives in food. The paper was primarily designed for the information and instruction of inspectors as to how to purchase samples, what outfit should be provided, what to buy and what not to buy, and the steps to be taken throughout in order that a case may not subsequently break down for want of compliance with the proper procedure A historical review of the ancient practice of adulteration serves as a suitable preface and in this occurs the following sentence 'The first real progress in the way of protecting the public health from adulterated foods, &c, *seems to have been* due to the action of the late Dr Thomas Wakley, Editor of THE LANCET, who in 1850 instituted an inquiry into the various articles of diet and proceeded to pillory,' *a la* Labouchere, the offending dealers by publishing their names on a sort of black list." The words which we have printed in italics should have been reduced to the simple word 'was,' the Sale of Food and Drugs Act admittedly being the outcome of the disclosures of this inquiry

THE METROPOLITAN HOSPITAL SUNDAY FUND A MAGNIFICENT DONATION

THE Metropolitan Hospital Sunday Fund for 1899 has made a promising start owing to the generosity of Mr George Herring of Hamilton place, who has given the princely sum of £10,000, the largest individual donation which has yet been received by the Fund Mr J Lane Densham, whose name is well known in connexion with the Mazawattee Tea Company, has given 1000 guineas, and several other considerable donations have also been received.

THE NEW FELLOWS OF THE ROYAL SOCIETY

WE are glad to be able to congratulate four members of our profession on having attained the honour of being elected Fellows of the Royal Society Major David Bruce, R.A.M C, is a graduate of medicine of the University of Edinburgh He was the first, in the year 1887, to successfully isolate and cultivate the micro-organism of Malta fever, the micrococcus Melitensis Mr Henry Head, M D Cantab, is an assistant physician to the London Hospital and has made some important researches upon the relation between visceral diseases and cutaneous tenderness Mr Ernest Henry Starling, M D Lond, is well known for his valuable researches in physiology and Mr Bertram Coghill Alan Windle, M D Dub, is the Professor of Anatomy and Dean of the Medical Faculty at Mason College, Birmingham

MR CHAPLIN'S DIFFICULTIES

LAST year's blundering on the subject of vaccination pursues the Government like a Nemesis. In last week's debate in the House of Commons on the Local Government Board Vote they were deserted by their friends and badgered by their foes, and though when the division came the usual party discipline prevailed Mr Chaplin had not a single Ministerial supporter all through the discussion. His opponents took credit to themselves for having forced the Government to grant the conscience clause, and, in the matter of the appointment of vaccination officers they did their best to make Mr Chaplin yield further or at least to emphasise the difficulties of the situation. The improvement in the returns of infantile vaccination in various parts of the country is not to the liking of the Anti Vaccination League and they are anxious to find material for another popular agitation If only they could get the public, or any considerable part of it, to regard them once more as martyrs their object would be gained, and, remembering the imprisonment of the Keighley Guardians many years ago, they appear to think that the Leicester Guardians might now be similarly dealt with and with similar results True,

the refusal of the Leicester Guardians to appoint a vaccination officer seems less likely to lend itself to their purpose than did the refusal of the Keighley Guardians to prosecute defaulters, but in their estimation any grievance is better than none and so Mr Chaplin is asked if he will imprison the Leicester Guardians if they will not find the money to pay a vaccination officer It is certainly unfortunate that he seems here to have rather played into the hands of his enemies by giving them the opportunity of alleging that the principles of local government are being infringed when guardians have to pay the salary of officers who are in a sense independent of them But that, again, is only part of the doings of Nemesis Last year the Government would not take the trouble or responsibility of introducing a really good Bill and now they are paying the penalty, for Mr Chaplin cannot afford to let the Leicester difficulty remain undealt with and still less can he afford to deal with it by yielding Looking to their unfulfilled promises in the matter of revaccination, it is not surprising that the Government receive little sympathy in their difficulties either from the medical profession or from their own supporters

DANGEROUS PAVEMENTS

WHERE the local authorities do not undertake or contract for the cleansing of footways and pavements adjoining any premises they may make by laws imposing this duty on the occupier of any such premises This is the substance of an important provision in the Public Health Act which may place occupiers under some responsibilities which have not perhaps been considered The butcher or the greengrocer probably gives little heed to the responsibility which may arise when by negligence he allows the pavement immediately opposite his shop to become dangerous through some person stepping on a piece of fat, orange peel, or banana skin It frequently happens that the area in front of a busy butcher's shop becomes slippery, especially in the hot weather, and in the event of an accident, which is not at all improbable, the butcher or greengrocer might be liable for very substantial damages, as indeed he ought to be Yet there is ocular evidence on the pavement day by day opposite most greengrocers' and butchers' shops in the metropolis of negligence in this matter which might lead to serious results In many cases we have seen the pavements thus rendered quite dangerous to the unwary passer-by The provisions of the Public Health Act, in our opinion, should be very strictly enforced in such a case, and, further, the police should be empowered to arrest a person who is found guilty of throwing a slippery substance like orange-peel on the pavement.

RED LIGHT AS A THERAPEUTIC AGENT

IN our conscious superiority to our forefathers we have been used to look with contempt on their practice of treating cases of small pox by means of red light in the form of red blinds, curtains, and coverlets, but with our present knowledge of the chemical and physical action of the different rays of the spectrum and the influence of light and darkness on life in its highest and lowest manifestations we may have felt a suspicion that, whatever the theory of the mediæval physicians, their practice may have had a scientific basis. In the last number of the *Zeitschrift für Krankenpflege* we find that it has been tried, and, apparently with remarkable results, in the treatment of measles A child, eight years of age, having sickened with an attack of measles of more than usual severity, was on the second day brought under the influence of the rays of least refrangibility, the windows being fitted with red blinds and a photographer's lamp with an orange-yellow globe being used for artificial light In three hours the rash had disappeared, the fever had subsided, and the child was playing cheerfully, complaining only of want of light The blinds were consequently removed, when three hours later the medical man was summoned to find that the eruption and fever had returned and the child was weak and prostrate The red light having been resumed the rash disappeared in little over two hours, as did the fever, this time permanently In two more days the cough had ceased and the child was well in every respect The brother and sister and a fourth patient infected from the first case were treated in the same way and with like success In the great epidemic of small pox in 1871-72 some cases were reported as having been kept in dark rooms with great benefit, especially as regards the pustulation and pitting Clearly what virtue there may be in this method lies in the exclusion of actinic rays and the substitution of red or orange-light for total darkness has obvious advantages as in the case of photographic manipulations

"THE SANITARY CONDITION OF ST PANCRAS"

IN our issue of June 3rd we commented upon a report of a special committee of the Health Department organisation of the Vestry of St Pancras We had not, however, before us the minutes of evidence upon which this report was founded The report referred to the "disorganisation" or "demoralisation" of the health department and in view of the importance of the matter we have applied to the Vestry of St Pancras for a copy of the minutes of evidence, asking the vestry either to send us a copy or to be good enough to inform us as to where we can procure a copy As soon as we have the evidence before us we shall return to the matter again

WE have received from Mr. W Hugh Spottiswoode a copy of a memoir of the late William Spottiswoode which from the fact that the centenary of the Royal Institution was celebrated this week is of great interest. It contains an address "On the Old and New Laboratories," delivered before the Institution by Mr Spottiswoode who was closely associated with its administrative affairs. He was also President of the Royal Society from 1879 to 1883 and had devoted much of his time to physical research. Mr Hugh Spottiswoode has recently presented to the Institution the collection of physical apparatus which belonged to his father, an excellent "Woodbury gravure," of whom forms the frontispiece to the memoir.

MR ROBERT WALLACE, M P for East Edinburgh, while speaking in the House of Commons on Monday night last was suddenly seized with cerebral hæmorrhage. When he was unable to continue his speech and was discovered to be suffering Sir George Pilkington and Sir William Priestley came to his aid. Mr John Burns accomplished no mean athletic feat by lifting Mr. Wallace in his arms and carrying him out of the House! Later he was removed to Westminster Hospital where he died early on Tuesday morning. The tragedy elicited the fact that the House of Commons is entirely without ambulance accommodation—a state of things which calls for alteration.

THE DUKE OF MARLBOROUGH has given in memory of his grandmother, Frances Ann, Duchess of Marlborough, a donation of £500 towards the cost of providing the new operating theatre of the Radcliffe Infirmary, Oxford, with appliances and equipment of the latest completeness The operating theatre has been erected by funds supplied by Mr J H Mason, of Eynsham Hall, Oxford, and by a subscription raised some years ago in memory of the present Duke's grandfather

DR "BEATTIE" CROZIER, the author of "Civilisation and Progress" and "A History of Intellectual Development," is

to be the recipient of an honorary LL D degree at the hands of the University of Toronto, the Governor-General of Canada and Dr. William Osler, F R S., being at the same time similarly honoured

H R H PRINCESS CHRISTIAN has signified her intention of presiding at the annual meeting of the Royal British Nurses' Association to-day (Saturday, June 10th) and of presenting badges to members on the occasion

THE annual distribution of diplomas awarded by the National Health Society took place on the afternoon of June 3rd at Grosvenor House, W, the presentations being made by H R.H Princess Christian

LORD ROSEBERY has promised to be present on Founder's Day, Saturday, July 29th, at the Royal Medical Benevolent College, Epsom

THE ROYAL MILITARY TOURNAMENT

THERE is every reason to believe that at the close of the Royal Military Tournament which will have taken place by the time we have gone to press the receipts will be found to be even greater than last year which was a "record" one Many of the seats, we understand, have been paid for by the charitable who wished to help the military charities but were unused, hence the seats which were noticed to be unoccupied Society has come to look upon the Tournament as a feature of the London season and it is quite safe to assume that it will always prove a success Since its inception we have taken the greatest interest in its welfare and by criticising from a hygienic point of view the home of the Tournament we have endeavoured to help the authorities to turn an unsuitable building into a sanitary success Under the able direction of the medical officers who have been in charge of the Tournament the Royal Agricultural Hall has been improved year by year and at the present time the hygienic conditions of the building are as perfect as it is possible to make them considering that the Hall at Islington was never intended to be put to the threefold use at the same time of a theatre, a military barracks, and stables As we have said the entertainment is an assured success and it is difficult to understand why the authorities do not remove the Tournament to a more suitable building or even erect either a permanent or temporary building of their own We have urged this course on several occasions and we feel certain that the press generally would support such a departure An amusing illustration of the difficulties with which the medical officers have to contend was shown by the action of some of the sailors engaged. Both sailors and soldiers, as a rule, do not love too much fresh air in their sleeping quarters and they frequently prefer the somnolent effects of a vitiated atmosphere Where some 300 men are sleeping in such a small space as is that which the Agricultural Hall is able to afford it is easily understood that it is necessary to have as many windows open as possible This, however, many of the sailors resented and it occasionally happened that a medical officer conscious of his responsibility with regard to the health of those under his charge and making a tour of the sleeping quarters in the small hours of the morning, found that a sailor had climbed to the roof and closed a window his excuse on being caught being usually, "Oh, sir, I felt such a draught" In a properly constructed building such incidents could not happen In spite of the difficulties with which they have to contend the medical officers do their work excellently and both Major H E R James R A M C, and his assistant, Surgeon Major Crooke Lawless of the Coldstream Guards, are to be congratulated on the perfection of the arrangements this year

While, however congratulating the medical officers we must not forget Veterinary Major R Rowe, A V D, who had charge of the animals in the building which (besides some 370 horses) included two camels, a kangaroo, and an emu, the last-named, it may be mentioned in passing, showed a great partiality for milk. We believe that special arrangements were made to keep the stalls scrupulously clean and the evidence of both sight and smell showed that these arrangements were well carried out

The arrangements for accidents which might happen either to the performers or the general public included a hospital and 20 men of the Royal Army Medical Corps stationed at various points in the building ready in case of emergency The St John Ambulance Brigade was also represented We are glad to be able to state that the casualties this year have been of a purely minor character

ROYAL COLLEGE OF SURGEONS OF ENGLAND

ELECTION OF MEMBERS OF COUNCIL

ON Thursday, July 6th, the election of members of Council will take place Usually at least three vacancies occur, but this year, as we mentioned in THE LANCET of May 13th, p 1309, in consequence of the term of office of Sir William Mac Cormac, Bart, K C V O, coming to an end during his Presidency, he will continue to be a member of the Council for one year longer, and therefore at this election there will be only two vacancies, for no vacancy through death has occurred

The following list of the 24 members of the Council gives the date at which each member retires —

Retire in 1906 Mr F Richardson Cross, Bristol Royal Infirmary, Mr Henry Morris, Middlesex Hospital, and Mr John Langton, St Bartholomew's Hospital (first elected 1890)

Retire in 1905 Mr H G Howse, Guy's Hospital (first elected 1889), Mr Edmund Owen, St Mary's Hospital, and Mr Rickman J Godlee, University College Hospital

Retire in 1904 Mr Thomas Bryant, Guy's Hospital (first elected 1880), Mr T Pickering Pick, Senior Vice-President, St. George's Hospital (first elected 1888), and Mr J N C Davies-Colley, Guy's Hospital

Retire in 1903 Mr A. Willett, St Bartholomew's Hospital (first elected 1887), Mr H T Butlin, St Bartholomew's Hospital, and Mr. F Treves, London Hospital

Retire in 1902 Mr Reginald Harrison (first elected 1886), Mr Howard Marsh, Junior Vice-President, St Bartholomew's Hospital (first elected 1892), and Mr J Hardie, Royal Infirmary, Manchester

Retire in 1901 Mr N O Macnamara, Westminster Hospital, Mr A W Mayo Robson, Leeds General Infirmary, and Mr W Watson Cheyne, King's College Hospital

Retire in 1900 Sir William Mac Cormac, Bart, K C V O, President, St Thomas's Hospital (first elected 1883), Sir Thomas Smith, Bart, St Bartholomew's Hospital, Mr J Tweedy, University College Hospital, and Mr Alfred Cooper

Retire in 1899 Mr T R Jessop, Leeds General Infirmary, and Mr J Ward Cousins, Royal Portsmouth Hospital,

An analysis of these names shows that at present St Bartholomew's Hospital has five representatives, Guy's Hospital has three representatives, University College Hospital has two representatives, and each of the following hospitals has one representative St George's, King's College, London, Middlesex, St Mary's, St Thomas's, and Westminster There are thus 17 members of the Council attached to the London medical schools, there are two members of the Council who are attached to special London hospitals, and five are attached to provincial hospitals Leeds General Infirmary has two, and Bristol Royal Infirmary Manchester Royal Infirmary, and the Royal Portsmouth Hospital have each one

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 7265 births and 3872 deaths were registered during the week ending June 3rd. The annual rate of mortality in these towns which had declined in the three preceding weeks from 17 7 to 16 0 per

1000, rose again last week to 17 7 In London the rate was 17 0 per 1000, while it averaged 18 2 in the 32 provincial towns The lowest rates in these towns were 8 5 in Brighton, 10 2 in West Ham, 11 5 in Cardiff, and 13 4 in Norwich, the highest rates were 22 6 in Preston, 22 9 in Wolverhampton, 24 3 in Liverpool, and 26 5 in Manchester The 3872 deaths included 386 which were referred to the principal zymotic diseases, against 355 and 351 in the two preceding weeks, of these 142 resulted from measles, 80 from whooping cough, 69 from diphtheria, 45 from diarrhœa, 27 from scarlet fever, and 23 from "fever" (principally enteric) The lowest death rates from these diseases were recorded in Brighton, Croydon, and Cardiff, and the highest rates in Leicester, Bolton, Burnley, and Manchester The greatest mortality from measles occurred in Nottingham, Liverpool, Bolton, Manchester, Salford, and Burnley, from scarlet fever in Bolton and Burnley, from whooping-cough in Oldham and Burnley, and from "fever" in Huddersfield The 69 deaths from diphtheria included 24 in London, nine in Sheffield, eight in Leicester, four in Liverpool, and three each in West Ham, Swansea, Manchester, and Leeds No fatal case of small-pox was registered during the week under notice either in London or in any other of the 33 large towns, and only one small pox patient was under treatment in the Metropolitan Asylums Hospitals The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2212, against 2161 and 2201 on the two preceding Saturdays, 260 new cases were admitted during the week, against 259, 211, and 229 in the three preceding weeks Influenza was certified as the primary cause of 24 deaths in London The deaths referred to diseases of the respiratory organs in London, which had been 257 and 256 in the two preceding weeks, further fell to 240 last week and were 33 below the corrected average The causes of 45, or 1 2 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in West Ham, Bradford, Leeds, Newcastle upon-Tyne, and in 14 other smaller towns The largest proportions of uncertified deaths were registered in Birmingham, Nottingham, Liverpool, and Sheffield

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns, which had been 19 0 and 16 9 per 1000 in the two preceding weeks, rose again to 19 9 during the week ending June 3rd, and exceeded by 2 2 per 1000 the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 15 5 in Leith and 16 9 in Paisley and in Perth to 20 8 in Aberdeen and 20 9 in Edinburgh The 607 deaths in these towns included 17 which were referred to diarrhœa, 16 to measles, 16 to whooping-cough, 11 to scarlet fever, five to diphtheria, and three to "fever" In all, 68 deaths resulted from these principal zymotic diseases, against 60 and 52 in the two preceding weeks These 68 deaths were equal to an annual rate of 2 2 per 1000, which was 0 4 above the mean rate last week from the same diseases in the 33 large English towns The fatal cases of measles, which had declined from 27 to 11 in the three preceding weeks, rose again to 16 last week, of which 12 occurred in Glasgow and three in Edinburgh The 16 deaths referred to whooping cough were within one of the number recorded in the preceding week, and included seven in Glasgow, six in Edinburgh, and three in Leith. The fatal cases of scarlet fever, which had been eight and three in the two preceding weeks, rose again to 11 last week, of which six occurred in Glasgow, three in Paisley, and two in Edinburgh The deaths from diphtheria, which had declined from six to one in the three preceding weeks, rose again to five last week, and included two in Glasgow The deaths referred to diseases of the respiratory organs in these towns, which had been 103 and 80 in the two preceding weeks, rose again to 108 last week, but were 25 below the number in the corresponding period of last year The causes of 41, or nearly 7 per cent, of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death rate in Dublin, which had been 26 8 and 26 5 per 1000 in the two preceding weeks, further declined to 22 1 during the week ending June 3rd During the past four weeks the death rate in the city has averaged 25 5 per 1000, the rate during the same period being 18 4 in London and 17 9 in Edinburgh The 148 deaths registered in Dublin during the week under notice showed a decline of 30 from the number in the preceding week, and included five which were referred to the principal zymotic diseases, against seven in each of the two preceding weeks, of these two resulted from whooping cough, one from measles, one from scarlet fever, and one from diarrhœa, but not one either from small pox, diphtheria, or "fever" These five deaths were equal to a rate of 0 7 per 1000, the zymotic death rate during the same period being 1 7 in London and 2 3 in Edinburgh The fatal cases of whooping cough, which had been three and one in the two preceding weeks, rose again to two last week The mortality from measles corresponded with that recorded in the preceding week The 148 deaths in Dublin last week included 24 of infants under one year of age and 34 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons showed a decline from those recorded in recent weeks Six inquest cases and nine deaths from violence were registered, and 56, or more than a third, of the deaths occurred in public institutions The causes of seven, or nearly 5 per cent, of the deaths in the city last week were not certified

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

STAFF SURGEON R E BIDDULPH is appointed to the *Duke of Wellington* Staff Surgeon Herbert E Marsh of the *Prince George* has retired in consequence of ill health Surgeons A Gaskell to the *Vivid*, R. L Price and E S Tuck to the Hong Kong Hospital, T C Meikle to the *Lannet*, and H S Burniston to the *Esk*

ROYAL ARMY MEDICAL CORPS

Major C H Burtchaell joins at Woolwich and Major E Eckersley is ordered to London for duty Colonel W F Stevenson is granted a three years' extension of his appointment as Professor of Clinical and Military Surgery at the Royal Army Medical School, Netley

YEOMANRY CAVALRY

Suffolk (the Duke of York's Own Loyal Suffolk Hussars) Surgeon Captain H C Martin resigns his commission, Alfred Cooper, late Surgeon and Honorary Surgeon Major, 14th Middlesex Volunteer Rifle Corps, to be Surgeon Lieutenant

VOLUNTEER CORPS

Artillery 1st Cornwall (Duke of Cornwall's) (Western Division Royal Artillery) Surgeon Lieutenant R T Cann resigns his commission Surgeon-Lieutenant C C Bullmore, from the 1st Volunteer Battalion the Duke of Cornwall's Light Infantry, to be Surgeon Captain *Royal Engineers* 1st Northamptonshire Surgeon Captain W Easby resigns his commission *Rifle* 2nd Volunteer Battalion the Prince of Wales's Own (West Yorkshire Regiment) Henry Mitchell, late Surgeon Major, Royal Horse Guards, to be Major 2nd Volunteer Battalion the Royal Welsh Fusiliers William Owen Evans to be Surgeon Lieutenant 2nd Volunteer Battalion the Durham Light Infantry George Stephen to be Surgeon Lieutenant. 2nd Volunteer Battalion the East Surrey Regiment Surgeon-Major W Gandy to be Surgeon Lieutenant-Colonel

INOCULATION FOR ENTERIC FEVER

In our issue of May 27th we announced that the War Office has decided that soldiers proceeding to military stations abroad where enteric fever is prevalent shall be given the opportunity, should they care to avail themselves of it, of inoculation against that disease The operation is entirely a voluntary matter as far as the soldiers are concerned Professor Wright of Netley, as the outcome of experimental investigations into the subject, considers that such inoculations exercise a protective influence against the disease and, as our readers are aware, when in India as a member of the Plague Commission he addressed some remarks, with the permission of the military authorities there, to the men of some British regiments serving in India Considering the scourge which enteric fever is to the young soldiers of our army serving in hot climates and the susceptibility of new comers to be attacked by it Professor

Wright will have rendered the army and the public generally a great service should his views prove to be correct when they have been tested by experimental trial on an adequate scale

THE PHILIPPINE WAR.

According to the latest accounts the rainy season is not to be allowed to interfere with the military operations in the Philippines, they are to be actively continued unless and until they prove impossible The situation at the present time seems uncertain and not altogether satisfactory A recent despatch from Manila reports the return of some hospital tugs with 500 wounded and heat-stricken troops from General Lawton's force, together with the news that the fighting had been very severe The Americans will have to send strong reinforcements if active operations on any adequate scale are to be carried on. It is said that local reports represent that the conditions during the rainy season of last year offered no insuperable obstacle to a campaign

BIRTHDAY HONOURS FOR THE SERVICES

The list of Birthday honours includes the names of Surgeon General A A Gore late Principal Medical Officer in India, who has been made a Companion of the Bath, and Lieutenant-Colonel W G King, Indian Medical Service, who has received a Companionship of the Order of the Indian Empire The decoration of the Red Cross has been conferred upon Miss Isabella Smith, R.N N S, in recognition of her devotion and competency in connexion with her nursing duties in naval hospitals at home and abroad and during the Benin Expedition

The London Companies Volunteer Medical Staff Corps will parade and attend the service at St Paul's Cathedral at 10 A M on Hospital Sunday

Correspondence.

"Audi alteram partem."

THE METROPOLITAN HOSPITAL SUNDAY FUND

To the Editors of THE LANCET

SIRS,—Next Sunday is "Hospital Sunday" and as President of the Fund I desire by your courtesy to make the customary appeal for the support and coöperation of the benevolent public on this interesting anniversary The movement was started at the Mansion House in 1873 and if £50,000 is raised this year no less than a million sterling will have been distributed through its instrumentality among the hospitals and dispensaries of the metropolis The Council are naturally anxious that this million should be reached and as over 1800 congregations have undertaken to devote their offertories on Hospital Sunday to the Fund there is ground for hope that the balance will be raised. Towards this result Mr George Herring has generously made the splendid contribution of £10,000 in a letter which I append Never were the claims of the medical charities more numerous or more urgent. No fewer than 140 hospitals and 55 dispensaries are seeking awards from this year's collection None of these are sufficiently endowed to meet their liabilities, most have no endowment at all. Many are in considerable debt and anxiety through meeting the pressing wants of the sick poor of London The hospitals, it should be remembered, are the training schools of the medical profession and for that reason, too, deserve grateful recognition and adequate support

While the population of London is, I am informed, increasing out of all proportion to its hospital accommodation the income of the institutions is not only non progressive but has actually fallen in comparison with the enhanced burden they have to bear This may partly arise through the detachment of the rich and well-to-do from residence in London and their removal to the easily accessible parts of the home counties, to whose local charities their money is diverted, and partly to the conversion of old and wealthy firms and businesses in the metropolis into limited liability companies with no power to contribute from their corporate income to purposes of charity However this may be, there is no improvement commensurate with the increase of the population in the funds for the relief of the sick poor

I cannot, I think, do better than conclude my appeal with the words in which THE LANCET forcibly sums up the situation —

The hospitals of London do noble work the amount done by them is out of all proportion to their revenues their slender incomes, being derived mainly from fortuitous charity are precarious and liable to fluctuations London the city of untold wealth, should be able to furnish not only adequate but regular hospital accommodation for its suffering poor Hospital Sunday provides the inhabitants of the metropolis with a regular and annual opportunity of showing their appreciation of the splendid work done by these medical charities. Give of your wealth and give of your poverty give of your gratitude for benefits received from medical service and give of your gladness that you have been spared from sickness give for love of man and give for love of God. To all orders of mind to all social grades and to all creeds alike the Metropolitan Hospital Sunday Fund must appear as a noble charity splendidly directed, economically managed, and equitably administered.

I shall be happy to receive at the Mansion House, as usual, the donations of those who may be prevented from contributing through their church or chapel offertories or of those who, interested in the wealth and prosperity of London, live in districts where no collections for the Fund are made I am, Sirs, yours faithfully,

JOHN VOCE MOORE, Lord Mayor

Mansion House, London June 5th, 1899

[COPY]

DEAR SIR,—I enclose my cheque for ten thousand pounds (£10,000) in aid of the Metropolitan Hospital Sunday Fund

In doing so I wish to bear testimony to the excellent method you adopt in immediately distributing the money collected, and I sincerely hope that the amount received this year will be so greatly increased as to enable you to relieve many of the unendowed charities from their pressing necessities Yours truly,

GEORGE HERRING

"FEES TO MEDICAL WITNESSES AT ASSIZES AND SESSIONS"

To the Editors of THE LANCET

SIRS,—With reference to the leading article in THE LANCET of May 6th (p 1237) relative to the allowances to medical witnesses attending law courts in criminal cases permit me to give you my own recent experience. A few days ago I received a summons to attend at the North London Sessions Court at Clerkenwell, London, to give evidence as to the mental condition of a prisoner, any failure to appear involving serious pecuniary consequences. The carrying out of this necessitated my leaving home the day before the trial and although by great good luck the case came on so early that I was able to reach home late at night on the second day, I was virtually absent from my own work two days For this I received two guineas and third class railway fare from Lincoln to London, out of which I was supposed to pay my hotel bill and cab fares, losing, of course, my usual professional earnings at home Remonstrating on being allowed only third-class railway fare I was informed that when there were no second-class carriages medical witnesses were only allowed third-class fare I need only remark that I returned home a poorer man after performing a public duty than before leaving —I am, Sirs, yours faithfully,

Lindum Holme Lincoln. GEORGE MITCHINSON

SUGGESTIONS FOR THE AMENDMENT OF THE RECENT VACCINATION ACT

To the Editors of THE LANCET

SIRS,—The recent Vaccination Act is now upon its trial and it must appear already to many public vaccinators cumbrous and difficult in working The duty of calling and apparently soliciting that children shall be vaccinated ought not to be imposed upon professional men It tends to lower the already unfavourable opinion of the British public as to the status of medical practitioners Not infrequently an empty house or a fresh tenant renders the visit useless The excuse is made that nothing was known of the four months' limit, and in many cases vaccination is declined, either with thanks or with language more or less unpleasant. These uncertainties render the work troublesome and difficult. In the present state of public feeling compulsion is doomed and the "conscience clause" with the four months' limit will

cause endless complications Whether with a majority of the people in its favour compulsion can be ethically maintained is a question which is open to argument, but with a majority on the other side it is hopeless

The question is—What is the remedy? and at present "force is no remedy" In a matter of this kind Englishmen abhor compulsion as nature abhors a vacuum. The people may be educated into appreciating the benefits of vaccination but they will not be driven to it The case for vaccination should be brought to the notice of every parent on the registration of a birth Vaccination should be free and easily obtainable, with present conditions as to lymph and operation, and the duty of ascertaining whether vaccination is desired by the public vaccinator might be entrusted to the vaccination officer If this were done the four months' limit might be done away with and the allowance of vaccination of children by parents would be practically voluntary Indirect compulsion for the protection of private or public interests would still continue and, like indirect taxation, would be little felt I am, Sirs, yours faithfully,

Loughborough, May 30th, 1899 J B PIKE

"PLAGUE IN BOMBAY"

To the Editors of THE LANCET

SIRS,—In THE LANCET of April 22nd (p. 1115) there appears under the heading of "Plague in Bombay" a review of the report of the Austrian Plague Commission Whilst I am deeply sensible to the gratitude expressed by the commission for the help I gave them I cannot in justice to myself and to the institution I control allow some statements which appear therein to go unchallenged But inasmuch as the writer—the late lamented Dr H F Müller—is no longer alive, I shall refrain from all personal allusions and confine myself to *facts* in dealing with his statements Dr Muller says "It was not customary at this hospital to use percussion or the stethoscope, and as we did so we seemed to incur the charge of unnecessary cruelty to the patients, we could not therefore rely on the nursing staff for assistance in this matter" This statement, you will allow me to state, is quite erroneous, to use no harsher term The patients never objected to percussion or auscultation as practised by us, but they, their friends, and the nurses were not used to the somewhat violent and anything but tender or gentle ways and modes of practice of continental physicians Dr Müller's manner and method of examination were disliked by all because of their roughness and because he would in all cases and without the least regard to the feelings of the patients or their friends assist in thoroughly examining them even when moribund or semi moribund It is true he was carried away by the excess of zeal in the study of plague and did it with the best intentions, but to him a plague patient was not a *man* but an *interesting case* for study and hence it was that there were frequent squabbles between him and the nurses and I had had often to intervene in order to pour oil on the troubled waters and thus smooth away difficulties Unfortunately Dr Müller had a quick, hasty, and irritable temper and used to take offence when none was meant and this was intensified by his want of proper knowledge of English My position was therefore very delicate, as on the one hand I had to give him all the assistance I could and on the other to see that the patients friends were not dissatisfied or grumbling about his ways It was indeed a happy relief to me when all these disputes ceased and Dr Müller had finished his examinations

As regards the examination of urine, &c, Dr Müller had daily examinations of several specimens and even after his return to Vienna I had forwarded to him several samples of urine properly preserved according to his directions

All the cause of soreness on his part was attributed partly to the above facts and partly to his idea that although we had studied over 1000 cases of plague before he came on the scene in Bombay we knew nothing about it You were kind enough to review my report on plague in 1898 and as I had published plague work *before* his *report* was out he felt somewhat disappointed and claimed priority in certain matters which I would not admit and hence all this bitterness

As regards the defects in the post mortem room, &c, you will no doubt admit that to gentlemen fresh from Vienna with laboratories and post-mortem rooms replete with all modern appliances our hastily improvised arrangements must have appeared crude, but such as they were they were placed at their entire disposal and that with all the difficulties that they mention they were able to do so much shows that they could not have been very serious. The Austrian Commissioners never realised our difficulties in dealing with the patients and their friends and their strong and deep-rooted prejudice towards hospitals and to anything like interference with their dead It was at times as much as my personal safety was worth to get them a body for post-mortem examination, and there were frequent threats of assault on me and my staff and on the post mortem room. And having assisted them in the way I did, it was scarcely generous of the commission to flaunt before the professional world some small inconveniences they had to put up with This is all that I need say on the subject Our difficulties you have already realised and some of them I have already described in my report. You may make what use you like of this letter and publish as much of it as you consider proper I have been compelled to enter at length into the subject as otherwise you would not have been able to fully gauge the meaning of a short reply

I am, Sirs, yours faithfully,

A H CHOKSY,
Khan Bahadur Chevalier of the Crown of Italy;
Medical Officer in charge, Arthur-road
Hospital Bombay

May 20th, 1899.

"THE PATHOLOGY OF THE PERICARDIUM"

To the Editors of THE LANCET

SIRS,—The point raised by your correspondents Dr Harry Campbell and Mr Barnard as to the mode of breathing in runners is one of great importance, especially to those who are interested in the subject of respiratory exercises Dr Campbell maintains that expirations during running are necessarily incomplete, while Mr Barnard says that "in a well trained cross country runner whose heart and respiratory pump are efficient for the exercise he undertakes inspirations are profound and expirations complete" I am disposed to differ from Mr Barnard in this statement for the following reasons In running the chest is held in an inspiratory phase—that is to say, the dorsal spine is kept extended and the shoulders are braced back, this position gives the best *point d'appui* for swinging the arms freely to and fro All long distance runners whom I know make use of this position and I have frequently observed it while running with harriers

For a long time past I have been making observations with the spirometer on singers and speakers and also on runners, and I have found that when the "expirations are complete," as Mr Barnard says they should be, the whole position is the reverse of that described above The dorsal spine is flexed—that is, it is in an expiratory position—and the shoulders and arms are brought well forward so as to decrease the antero posterior diameter of the chest as much as possible and the chest is collapsed I have never yet seen this position assumed during running

I am, Sirs, yours faithfully,

Harley-street W, June 6th 1899. GEORGE CATHCART.

LECTURESHIPS ON "TRADE DISEASES."

To the Editors of THE LANCET

SIRS,—We are having schools of instruction in "tropical diseases" established in London and Liverpool, while lectureships on that subject have been instituted in Edinburgh and elsewhere All this is very satisfactory As a maritime and colonising people and as the holders of tropical possessions it is essential that our medical men should have every facility for acquiring a practical knowledge of the maladies prevalent in hot countries But while congratulating ourselves on this important step which has so direct a bearing on our interests abroad I think it would be well to give some attention also to a matter which lies nearer home I refer to the providing of instruction in regard to diseases arising from, or aggravated by, the industrial pursuits of our British people We are a maritime people and a colonising power but we are also, and first of all, a manufacturing people Our position in the world—our wealth and our power—essentially depend on our skill and capacity as manufacturers Our possessions abroad afford markets for our goods, and our ships convey them thither, but at the root of all lies the making of these goods.

And therefore the health and well being of those engaged in industrial pursuits is to us as a nation a matter of prime importance So far as I am aware there is no lectureship or special course of instruction given on "trade diseases" in this country I am aware that the subject falls under the heading of "Hygiene" and that it is dealt with as a part of "public health," and it may be argued that this is provision enough. I do not think so As well may it be contended that "tropical diseases" fall under the heading of "Practice of Medicine" and that therefore special courses on that subject are unnecessary

My proposal is that special lectureships on "trade diseases" should be instituted at the medical schools in our large manufacturing towns and that these lectures should be illustrated and supplemented by visits to factories and public works These visits would afford valuable object lessons to the young students of Æsculapius, not only contributing to their medical education, but widening and deepening their knowledge of the life conditions of the labouring classes and giving them some idea of the wonderful skill and energy which have placed us where we are as a nation I must cut this letter short as I have already encroached too much on your space Hoping that the subject may be taken up,

I am, Sirs, yours faithfully,

JAMES W ALLAN, M B Glasg,
Dispensary Physician, Glasgow
Royal Infirmary

Glasgow, June 5th, 1899.

THE INCUBATION PERIOD OF CHICKEN POX

To the Editors of THE LANCET

SIRS —I was recently asked to attend some children who were "broken out all over," On examination I found that they were all suffering from varicella as was a *seven day old infant*, who had a good crop of typical chicken pox vesicles The case of this infant seems to me to be worth recording as an instance of varicella where the incubation period could not possibly have been more than seven days From 10 days to a fortnight is the period given by most authorities —I am, Sirs, yours faithfully,

C L BIRMINGHAM, M D R U I

Gatcombe-road, Tufnell-park London, N June 5th, 1899

THE VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND

To the Editors of THE LANCET

SIRS,—Inasmuch as there was no change in the office of President or Vice President this June election which took place to-day, I desire to inform the Fellows of the College that last year when I expressed to the electors my determination to offer myself for the office of Vice President I felt that my long service to the School and College as senior demonstrator, examiner, and councillor, and my seniority as a surgical teacher and as a hospital surgeon, might reasonably deserve recognition by the Fellows and that I might hope to be honoured with election to the office I then sought Unhappily, personal and domestic circumstances prevented me from giving prominence to my candidature until others had occupied the ground in some degree, and as a contest is extremely distasteful to me and in my opinion is not to the advantage of the College I thought it best to refrain from presenting myself for the vice-chair until the next legitimate vacancy occurs in June, 1900 I desire, however, to assure the Fellows that under any circumstances I shall do so when that time arrives With this intimation I trust that my friends and supporters among the Fellows will not be induced to pledge their votes to any other candidate for the next Vice-Presidency —I am, Sirs, yours faithfully,

L. H ORMSBY, M D Dub, F R C S Irel

Merrion-square, Dublin June 6th, 1899.

THE ACCURACY OF THE MEDICAL REGISTER

To the Editors of THE LANCET

SIRS,—Your annotation in THE LANCET of June 3rd (p. 1503) headed "Sir George Pilkington, M P, and the Medical Register," interests me I had occasion some years ago to change my name (omission of two superfluous Christian names) by deed poll registered in the High Court of Justice The officials of the Royal College of Surgeons and the Apothecaries' Company at once complied with my request to make the correction in their official lists, but the General Council of Medical Education and Registration refused to make the necessary alteration till I paid them a small fee, which I did under protest This, no doubt, explains the omission you refer to in the case of Sir George Pilkington. I am, Sirs, yours faithfully,

F R C S ENG AND L S A

June 3rd, 1899.

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT BERLIN

(FROM OUR BERLIN CORRESPONDENT)

(*Concluded from p. 1517*)

THIRD DAY

Curability of Tuberculosis

PROFESSOR CURSCHMANN (Leipsic) said that cases might be regarded as cured when the tuberculous infiltration had no tendency to exacerbation, when there was no extension of the morbid process to other parts of the lungs, and when the general state of the patient continued to be good These conditions were not infrequently fulfilled, and a still greater number of patients were relatively cured; the local process continuing, but the patients nevertheless feeling quite well and being able to work No reliable statistics could be given as to the percentage of cases cured The modern dietetic and hygienic treatment had given the best results No real specific remedy had yet been discovered. The cases where tuberculosis was still in the first stage had the best chances of being cured and early diagnosis was thus very important The so-called "latent" forms must be specially kept in view The influence of climatic conditions was not so great as had been believed and "immune zones" did not exist Persons whose social circumstances were propitious and those who were no longer young had the best prospects of recovery Predisposition to tuberculosis might be hereditary.

Professor Koch's Tuberculin

Professor BRIEGER stated that an unwarranted pessimism had succeeded the enthusiasm with which Professor Koch's discovery was at first received It was nevertheless undeniable that tuberculin had a specific action and that it enabled a diagnosis to be made of doubtful cases, but in advanced cases the tuberculin test failed because the organism was already saturated with tuberculin The majority of medical men were now opposed to the use of the tuberculin test, as they were afraid of accidents which might, however, be easily avoided. Tuberculin was, moreover a specific remedy for tuberculosis, acting exclusively on the tuberculous process and being without any influence on the complications Uncomplicated tuberculosis in the first stage might sometimes be cured by the administration of tuberculin, and cases in a more advanced stage, where tuberculosis was combined with other pathological alterations, might be improved A good deal of experience was necessary for the selection of cases fit for the tuberculin treatment In sanatoria tuberculin ought to be used together with the other methods of treatment

The Climatic Treatment of Tuberculosis

SIR HERMANN WEBER (London) was explicit in stating that it was useless for a patient merely to reside at a health resort without being at the same time under medical supervision. For the majority of patients, especially for those of the poorer classes, the treatment in sanatoria was preferable. Speaking of the selection of a health resort he said that patients in whom the progress of the tuberculosis was slow ought to seek a warm climate, if tuberculosis was combined with diabetes places with a dry and warm climate were preferable. Cases with severe catarrh must be sent to sheltered places, patients whose constitution was relatively strong would benefit from residence in high altitudes or from sea voyages The houses occupied by the patients should stand on a dry site and should be exposed to the sun, they must also be sheltered from cold, winds and dust Patients at health resorts must on no account fatigue themselves at games or social entertainments, and for this reason among

others they ought to be under the care of local physicians In every climate pulmonary tuberculosis was curable at the onset and the multiplication of sanatoria was strongly to be recommended

Treatment of Tuberculosis by Drugs

Professor KOBERT (Rostock) said that the physician could not do without the administration of drugs in advanced cases where hygienic treatment was no longer available Sedatives, antipyretics, tonics, &c, must be prescribed according to the requirements of individual patients In local tuberculosis of the bones, joints, and skin iodoform was very useful Creasote was to be recommended in the later stages together with injections of camphorated oil The results said to have been obtained with ichthyol, cinnamic acid, and Peruvian balsam required further verification — Dr VON SCHROTTER (Vienna) showed two patients who had been operated on for laryngeal tuberculosis 13 and nine years ago respectively and who were permanently cured — Dr J G SINCLAIR COGHILL[1] (Ventnor) spoke of the hygienic and dietetic treatment followed in England and Dr DETTWEILER, physician to the Falkenstein Sanatorium, on the open air treatment —Professor LANDERER read a paper on treatment by cinnamic acid

FOURTH DAY

The Congress on this day took into consideration the subject of sanatoria for the wage earning and the poorer classes A great many delegates from the sick clubs and trade unions of Germany attended, and were received in terms of welcome by the Chairman, Dr Gaebel, President of the Imperial Insurance Office

The Origin and Maintenance of Sanatoria

Professor VON LEYDEN stated that the first sanatorium for the poor was established in England as early as 1814 Nowadays sanatoria existed in nearly every country of Europe and in America In Germany the first endeavours to establish sanatoria were made in 1882, especially by the Verein für Innere Medicin There were at present 31 sanatoria in Germany for the benefit of the working classes —Herr MEYER (Berlin) then read a paper on sanatoria from the financial point of view He argued that they ought to be supported by sick clubs, by employers' associations, and by the State

Phthisis among the Working Classes

Dr R FRIEDEBERG, the delegate of the Berlin Industrial Sick Clubs, was of opinion that tuberculosis was peculiarly a disease of working people as every second member of the clubs died from this cause The working classes appreciated the efforts of the Government and the charitable associations in combating the disease but they believed that matters would not improve until better social conditions prevailed The medical officers to the sick clubs ought to be authorised to send phthisical patients to sanatoria in an early stage while a cure was still possible The nature of the disease and the methods of preventing it ought to be explained to working people by medical men reading papers at club meetings and by pamphlets written in popular language, and the inspectors of factories ought also to have a watchful eye on their hygienic conditions

Provision for the Families of Phthisical Subjects

Dr PANNWITZ said that systematic arrangements ought to be made for maintaining the families of phthisical workmen Working men were apt to come to the sanatoria too late and to take their discharge too soon because they were afraid of leaving their families in distress A good deal of charitable work might be done by the Red Cross Association in relieving their families, and the future of those who had left sanatoria either cured or improved also invited attention Whilst staying in the sanatoria the patients must be helped to find employment perhaps more suitable for their health Dr Pannwitz recommended the establishment of farms where the patients after having left the sanatoria might stay for a certain time and be employed in agricultural work

Dr RUFENACHT WALTERS (London) described the sanatoria in Great Britain, mentioning that in England the open air treatment had been in use a long time before Dr Brehmer established the first sanatorium in Germany

Professor BAGINSKY advocated the establishment of special sanatoria for children

Dr WEICKERS (Görbersdorf) said that he had inquired into the state of health of the patients after they had left the sanatorium He had found that of those who had come for treatment in the beginning of the disease more than 95 per cent remained in good health for more than four years. Patients with very advanced tuberculosis were unsuitable for sanatorium treatment It was an act of unwise sentimentality for a medical man to send such cases to sanatoria where they disturbed the other patients without deriving any benefit themselves It had been ascertained by statistical research that the life of these patients was not prolonged by residence in a sanatorium —Professor BROUARDEL (Paris) expressed approval of the opinions held by Dr Weickers

Papers were also read before the Congress by Professor EWALD, on Sanatoria at the Seaside, by Dr HOBE, on Sanatoria for the Middle Classes, by the Spanish delegate, Dr JOSE JUAN DOMINE, on the Spanish National Sanatorium in Porta-coeli, by Dr, VAUGHAN on Sanatoria in England, and by Dr MOHARREM BEY (Cairo) on International Sanatoria The Congress was closed on Saturday, May 27th, by the honorary president, the Duke of Ratibor Professor BROUARDEL expressed the thanks of the foreign delegates to the committee

The members of the Congress were shown over the sanatorium of the Red Cross Association at the Grabow See, near Berlin, and the sanatoria in Belzig and Blankenburg The committee and the foreign delegates, including Sir Thomas Grainger Stewart and Sir Hermann Weber, were received by the Emperor and Empress at Potsdam

[1] Dr Coghill's paper was published at length in THE LANCET of June 3rd We regret to learn that Dr Coghill died shortly after his return to England. An obituary notice will be found on page 1583.

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

Captain Leumann's Report on Inoculation for Plague in Hubli —The Decline of Plague throughout India —Plague in Mauritius

THE town of Hubli has perhaps afforded the best test for the value of inoculation in plague and the report of Captain Leumann, I M S, is so exhaustive that we have in it one of the fullest records of plague administration and of the efficacy of inoculation General sanitary measures were adopted and isolation of the sick with segregation of contacts and evacuation of infected dwellings were also carried out, but—and here is the difference—inoculation was given a full opportunity by the concessions which were granted to those who were twice inoculated These people were allowed to remain in their homes and to carry on their occupations The consequence of this policy was that the natives inundated the inoculation stations clamouring for the operation They moreover saw that persons inoculated almost entirely escaped the disease while those non inoculated suffered severely From May 11th to August 23rd 33,880 persons were inoculated (24,138 twice, 9742 once) In all 58,018 inoculations were performed in 15 weeks, or an average of over 550 a day Captain Leumann has himself performed 22,000 inoculations and on one day performed over 1000 operations

The statistics of mortality have all been published before. Suffice it to say that the actual plague deaths have averaged 85 per cent in favour of the inoculated Over 95 per cent of the population of Hubli have now been inoculated Captain Leumann nevertheless says "While paying the highest tribute to the value of Mr Haffkine's inoculation method which I claim here in Hubli to have been put to perhaps the severest test to which it has been subjected I am of opinion that individual protection is, on however great a scale conducted, of less importance to that of general protection by sanitation and hygiene (considering each method separately, that is to say) for it seems to be more radical if not more rational to eradicate a disease than to leave it to pursue its course and only to protect people against its ravages But I see no reason whatever why the two methods should not be utilised together and as there appear to be various difficulties regarding the proper application of sanitary measures to allow inoculation its fullest scope" Amongst other observations recorded Captain Leumann says that the general health of inoculated persons seems to be improved as shown by the lower death rate from

"other causes" He has found pustular eczema not only benefited but in some cases cured Lupus, however in four cases noted was greatly aggravated, and in undoubted phthisical subjects the cough was aggravated and there was an increase of hectic and of sweats. Two cases of long-standing epilepsy were supposed to have been cured

Captain Leumann admits that owing to the great difficulties in carrying out sanitary measures inoculation must of necessity come more prominently to the front. He still holds that early notification is the first and most essential factor in dealing with epidemics, but he knows that the natives of India will not notify and records the fact that not more than 20 per cent of plague cases in Hubli have ever been reported as such before death. He also holds that the removal of plague cases is equally important The fact that neither of these objects can be accomplished in the face of native apathy or opposition would surely suggest that individual protection by inoculation was a much more important measure during a plague epidemic than any attempt at general sanitary administration It is necessary to employ segregation and evacuation as an alternative, however, otherwise there would not be sufficient inducement to the native to be inoculated Great tact seems to have been shown in plague administration generally for at other places where similar opportunities have been offered for the display of administrative capacity the same happy results have not been accomplished The report is full of most interesting detail and will be a useful guide to the authorities in the Bombay Presidency should plague continue in India after the present season

There were 1133 deaths from plague in India last week. In the Bombay Presidency there were 1034 of which Bombay city accounts for 323 deaths and Karachi city for 181 As the general mortality in Bombay city was more than 500 over the average there Government returns of plague apparently fall far short of the actual truth.

There were only 149 deaths outside the Bombay Presidency Madras Presidency reports 10 North Arcot four, Salem district five Mysore State 51, Kolar Goldfields 32, Mysore city 18 The Punjab returns nine and Bengal returns 74, Calcutta contributing 60 and Howrah 14 All other Bengal districts now return clean sheets

Calcutta shows during the present month a marked decline of plague deaths Commencing in January with four deaths there was an increase in February to 28 deaths In March the outbreak seemed to suddenly take on virulence and 426 deaths were recorded. During April there were 499 deaths, but for the first 16 days of May only 134 have been recorded—a very rapid and marked decline. The general death rate for the past week was 40 0 per 1000 per annum, against 34 3 the mean of the last five years In the suburbs the death-rate was 38 3 per 1000 per annum, against 40 7, the mean of the last five years. The general death rate of the combined area is equal to 39 5 The three cities of Karachi, Bombay, and Calcutta all show great improvement in the number of plague deaths

The Governor of Mauritius reports three fresh cases of plague on May 1st

May 18th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT)

The Liverpool Corporation and the Housing of the Working Classes Demolition of Insanitary Property

MR. G W WILCOCKS C.E, Local Government Board inspector recently held an inquiry at the municipal offices with reference to an application of the corporation to borrow a further sum of £50 000 for the demolition of insanitary property and £13,500 for the building of workmen's dwellings Dr Hope stated that the property to be dealt with consisted of houses in which sickness was almost always prevalent Typhus fever which had been practically eradicated from every other town in England, lingered in the districts included in the presentment. The heavy death rate of Liverpool was entirely owing to the existence of property of this character Taking away the insanitary districts it would be found that the rest of the city had a death rate of under 18 per 1000, whereas in the insanitary districts the death rate was 40 2 per 1000 In Lace-street district the population was from 800 to 1000 to the acre The sanitary arrangements were abominable, especially in cases of sickness, bad weather, or the presence of gangs of roughs, when the common convenience at the end of a court could not be used The Parks Committee had endeavoured to brighten these places by distributing window boxes, but it was found that owing to the absence of sunlight and air plants would not grow amidst these hovels The property was ruinous, saturated in the interior with organic filth from generations of inhabitants, and owing to age and neglect nuisances of the grossest character were common The inspector asked whether the corporation proposed to rebuild at the same time that they demolished, as the Local Government Board felt that more should be done in the direction of re-housing, The Board required that a scheme of demolition should not be undertaken without considering what was to become of the population Mr Henderson, one of the city councillors, said that since 1884, when these demolitions began, the destruction of insanitary property had progressed rapidly but the provision for re-housing had not progressed at anything like the same rate On that occasion for example, the corporation were applying for £50,000 to demolish property and only £13,500 to rebuild In his opinion the figures ought to be reversed. Dr Hope said that he was in a position to prove that previous demolitions had not resulted in overcrowding sublet houses as stated In 1894 there were upwards of 20 000 sublet houses on the register supervised by a staff of 11 inspectors, who had been subsequently increased to 13. As a result of stringency and prosecutions the sublet houses had decreased to 17,000 while the cases of overcrowding were fewer

Sir W Mitchell Banks, M D Edin LL D, F R C S Eng

The honour of knighthood conferred on Mr William Mitchell Banks upon the occasion of Her Majesty's birthday has given unqualified satisfaction to the profession in Liverpool Sir William Mitchell Banks's career has been highly distinguished He graduated M D at the Edinburgh University in 1864, obtaining the gold medal for his thesis on the Wolffian bodies He subsequently became demonstrator of anatomy at the Glasgow University, where he remained for two years prior to his removal to Liverpool His ability as a skilful surgeon received early recognition and the profession in that city have since bestowed upon him every honour which it was in their power to give His first appointment in Liverpool was that of pathologist to the old Royal Infirmary He also filled the post of lecturer in anatomy in the Royal Infirmary School of Medicine, becoming the first professor of anatomy upon the affiliation of that school to University College in 1881 Sir William Mitchell Banks was amongst the foremost of the founders of the college and to his efforts, in conjunction with those of Dr Waters and others, was due the rebuilding of the Royal Infirmary which is considered to be one of the finest hospitals in Europe. His appointment as honorary surgeon to the Royal Infirmary, of which he is now the senior surgeon dates from the year 1877. He has been a member of the Council of the Royal College of Surgeons of England and for some time he represented the Victoria University on the General Medical Council He filled the office of President of the Liverpool Medical Institution in 1890-91 A few years since the profession in Liverpool presented him with his portrait painted in oils by the Honourable John Collier He was recently honoured by his *alma mater* the University of Edinburgh, with the honorary degree of LL.D His urbanity and kindliness of manner are everywhere recognised and whilst it can be said that his friends are legion it may be safely affirmed that he does not possess an enemy

Hospital Saturday Fund Ladies Street Collection.

The ladies' annual street collection in aid of the Hospital Saturday Fund took place on June 3rd in summer weather Upwards of 900 ladies wearing white badges with the inscription "Ladies Hospital Saturday Fund," devoted themselves to the collection. The committee of the fund have made a new departure by collecting on the day prior to the street collection in offices and business premises where the principals seldom come to the city on Saturdays. Last year's street collection realised £793 Chiefly from the workshops the substantial sum of £3099 has already been received by the treasurer of the Hospital Saturday Fund This aggregate illustrates the value of systematic contributions

The Hospital for Cancer and Skin Diseases

A strong feeling exists amongst the members of the profession that Dr Taylor and Dr Whitford have been unjustly

dismissed from their posts at the Cancer and Skin Hospital The opinion prevails that they should be reinstated They both alleged that the sub-committee which had inquired into the charges and counter-charges preferred by the medical officers had ignored several important items of evidence, and as this statement, if correct, would imply a certain amount of bias on the part of the sub-committee the matter ought not to be allowed to remain in its present condition

Presentations to the Medical Officer of Health of Liverpool

In view of the approaching marriage of Dr E W Hope, the medical officer of health, the members of the Watch Committee of the City Council have presented him with a silver salver of an early Georgian pattern The presentation was made by the chairman of the Health Committee (Mr E H Cookson) in an appropriate speech The staff of the Public Health Department of the corporation have also presented Dr Hope with a massive silver centre-piece of Grecian design Mr James Cooper, the chief inspector, was the spokesman on the occasion on behalf of his brother officials

Liverpool Corporation Hospital Extension

Mr Noel T Kershaw has intimated the Local Government Board's sanction to the borrowing by the Liverpool Corporation of £3500 for the purchase of land for hospital purposes, £20,000 for the erection of a small-pox hospital, and £40,000 for the extension of the City Hospital East, Mill lane, Old Swan

June 6th

SCOTLAND

(FROM OUR OWN CORRESPONDENT)

The Prevention of Tuberculosis in Scotland

A CONFERENCE with respect to the prevention and control of tuberculous diseases took place last week between the Public Health Committee of Aberdeen Town Council and a deputation from the Aberdeen, Kincardine, and Banff Branch of the British Medical Association Among the representatives of the former were Dr John Robertson, convener, and Dr A T Gordon Beveridge, together with Dr Hay, medical officer of health of the city The deputation from the British Medical Association consisted of Professor Kinlay (branch president), Professor Stephenson, Dr Scott Riddell, Dr A T Milne, and Dr Edmond Dr Hay's memorandum, of which a summary lately appeared in THE LANCET, having been considered, the medical men present approved of a regular inspection of dairies, the application of the tuberculin test, and the employment of a veterinary surgeon as inspector These steps would, in their opinion, render sterilisation of milk unnecessary As to meat-supply, they were in favour of a municipal slaughter house With regard to the proposed sanatorium (in the country) for phthisical patients they were strongly in favour of the idea being carried out either at the expense of the rates or by voluntary subscription On the suggestion of the deputation it was agreed to hold a conference with the directors of the Aberdeen Dispensary, the managers of the Royal Infirmary, and the Aberdeen Parish Council, with a view to a practical scheme being framed

Aberdeen Royal Infirmary

The month's house to house collection on behalf of this hospital, organised by the executive of the Hospital Saturday Committee in Aberdeen, has produced rather more than £500—a result which has disappointed expectations The proposed demonstration on behalf of the hospitals in the city has been postponed to August 11th and 12th next so as [illegible]mit of the attendance of a detachment of the New [illegible]stay for [illegible]es Lancers

[illegible]perork

[illegible]nth Wa[illegible] Rufena *University Volunteer Medical Staff Corps*

[illegible] in Great B[illegible]t into camp at Charleston Park, Aboyne, [illegible]tment had t[illegible] the residence of the Marquis of Huntly, [illegible]hed the first su[illegible]niversity, on the evening of June 1st [illegible] took place on the ground and the [illegible]ghills paper was [illegible] The weather was favourable [illegible]joyed by the students

Aberdeen

[illegible]

[illegible]

[illegible]

[illegible]

IRELAND

(FROM OUR OWN CORRESPONDENT)

The Royal Victoria Hospital, Belfast

AT a meeting of the Executive Committee held on May 31st the plans for the new Belfast Royal Victoria Hospital were presented and unanimously passed These maturer plans have been most carefully worked out by the architect, Mr Herman (who designed the Birmingham Hospital), in conjunction with the hospital staff and the construction committee They provide for about 300 beds in 19 wards, generally of 16 beds each, with the necessary accessory rooms, including a certain number of single wards, all of which are situated on one floor level, thereby avoiding both staircases and lifts, in addition to which there is the extern department consisting of a large waiting hall surrounded by a number of consulting and retiring rooms Adjoining this is the pathological department, all on the same floor level The principal entrance is near the centre of the site on the Grosvenor street side, past a porter's lodge, to an open courtyard, around which on three sides are arranged the administrative departments, a spacious entrance hall being in the centre On one side provision is made for the medical and surgical resident staff; on the other are sitting rooms for the nursing staff with bedrooms above On the south side is a wide corridor running the full length of the building, by which all accommodation for patients can be approached A large lecture theatre and suitable accommodation for students are also provided In addition to the facilities in administration secured by having all wards and rooms for patients on one floor level the arrangement is particularly adapted for simplifying the application of the plenum system of ventilation which the committee have decided to adopt The materials to be employed for the exterior have been selected with a view to produce a pleasing effect of colour—grey sand faced red brick and terra cotta for the walls, green slates for the roofs, and lead on the small-domed ventilating turrets

Drumbeg Dispensary District

Mr Munce has been elected medical officer of the Drumbeg Dispensary District of the Lisburn Union

Salary of an Analyst

The guardians of Newtownards, county Down, are advertising for a trained nurse and an analyst, the salary in the former case being £40 per annum, while in the latter candidates are required to state what sum they expect "for making an analysis of about 100 samples of medicine."

Portstewart Dispensary

I am glad to know that the Local Government Board have declined to give their sanction to the miserable salary of £60 per annum proposed to be paid by the Coleraine Guardians to the Portstewart Dispensary medical officer on the ground that it was inadequate remuneration for the duties to be discharged By a majority the guardians have now agreed to pay £75

June 6th.

PARIS

(FROM OUR OWN CORRESPONDENT)

The Artificial Stimulation of Glands by Raising their Temperature

AT the meeting of the Society of Biology held on May 20th M Lépine recounted some experiments which he had performed He had found in the case of a dog the abdomen of which he had opened that if the spleen were lifted out and placed in a capsule so that it could be surrounded by water at a temperature of from 40° to 50 C, the injection of a dose of typhoid fever toxin which proved fatal to another dog under ordinary conditions was easily resisted by the dog experimented upon Hence he considered that this treatment of the spleen produced an increased quantity of antitoxin At the same time he found that the blood of the splenic vein contained less sugar than that of the carotid artery If the warming of the spleen was continued for two hours, the proportion of sugar remained the same But if the pancreas was warmed in the same way for two hours and its nerves stimulated the

quantity of sugar in the arterial blood fell rapidly, showing that the action of the pancreas is to promote glycolysis It acts both by its internal secretion and by destroying substances which exert an inhibiting influence upon glycolysis Hence it is plain that the taking of pancreatic substance by ingestion in diabetes does no good because the gland is taken as a dead substance; but on the other hand, if a portion of pancreas be transplanted under the skin and so remains and acts as a living organ, it is reasonable to expect it to exert a favourable influence.

Edible Locusts

At a recent meeting of the Pharmacy Society, M Marty showed on behalf of M Roeser, a pharmaceutical chemist at Tunis, some specimens of locusts prepared as food by the natives M Roeser sent with these an account of the method of preparation and pointed out that according to his estimation of the nitrogenous, fatty, and saline matters in this diet it was obvious that the poor people who were the general consumers of it were in possession of a food product having a very real value

M Brouardel on the Plague.

M Brouardel, who is Dean of the Faculty of Medicine and President of the Committee of Hygiene, has communicated some opinions to a journalist upon the chances of the plague spreading to France M Brouardel considers that if the plague should arrive in Europe the devastation wrought by it would be widespread, for many small ports, to say nothing of more populous towns in which old districts exist, are in a deplorable sanitary condition and would constitute so many centres for the propagation of the plague which it would be most difficult to destroy He thinks, however, that it will not be easy for the scourge to spread to France by way of the sea on account of the strict quarantine regulations imposed upon all vessels coming from suspected ports At Marseilles, for instance, the lazaretto of Frioul[1] is admirably organised and has power to exercise the most strict surveillance over both goods and passengers, so that fear of the spread of the infection by this route may practically be disregarded. In M Brouardel's opinion the great danger lies in the risk of transmission by land and if, for example, the plague should invade Turkey it would be almost certain to spread, for in that country it is next door to impossible to carry out any sanitary measures

Foreign Students in Paris.

The Education Minister has just issued the statistical report of students in the various faculties up to Jan 15th, 1899 In the Faculty of Medicine there are 7758 students, of whom 4072 belong to the Faculty of Paris The foreign students number 700, of whom 88 are women. Since the promulgation of the new regulations which forbid foreigners the right to practise medicine in France, even should they have studied in a French faculty, the number of foreign students has been diminishing While on this subject I feel that I must give some information which will be important to those English students and medical men who so often apply to THE LANCET for information as to the practicability of gaining a livelihood by the practice of their profession in France A medical man or a medical student especially if he has not an absolutely perfect knowledge of French could not possibly support himself here solely by making use of his medical knowledge. Practice is forbidden to the qualified man by the French regulations on the matter, he may not even attend his own countrymen when ill In addition, the number of practitioners who are in possession under former regulations of the right to practise is greatly in excess of the requirements of the foreign colony As for a student, the only post he can hope for is that of secretary or assistant in a private clinic and even these posts are as a rule unpaid or only paid at a very low rate. Most French medical men who occupy themselves chiefly with scientific work can read English scientific treatises perfectly well and even if they cannot do so there are plenty of Russian students available who are very poor who have a perfect acquaintance with three or four languages and who give their services at a very low price Even of these the supply exceeds the demand

Obituary

Dr Louis Alphonse Charpentier, Professor and Fellow of the Faculty of Medicine, Paris, died on May 29th, aged 63 years He was a member of the Academy of Medicine and was born in Paris in 1836 He took the degree of Doctor of Medicine in 1863 and was appointed head of the Obstetrical Clinic in 1869 and a Fellow and Professor at the Faculty of Medicine in 1872. On Nov 25th, 1884, he was elected a member of the Academy of Medicine and was made a Knight of the Legion of Honour in 1887 He was very successful in his profession and had one of the largest obstetrical practices in Paris Despite his numerous engagements he found time to collect and publish the results of a great number of observations and a large amount of original work, especially upon the diseases incident to the puerperal state He was for some years editor of the *Nouvelles Annales d'Obstétrique et de Gynécologie* and in 1883 he published his *Traité Pratique des Accouchements* which is considered to be a classic He had been President of the Gynæcological Society

June 6th.

[1] THE LANCET Jan. 28th, 1899, p. 233.

SWITZERLAND

(FROM OUR OWN CORRESPONDENT)

Alcoholism in Switzerland

DR. SCHLUB of Basle publishes interesting details on this subject aided by the official death reports and thus obtains statistics which, alas, must be even rather below the correct estimate, as only certain and evident cases of alcoholism are sure to be notified From an analysis of the death rate of the 15 largest towns of Switzerland the following data are obtained Out of a total of 7257 deaths occurring in the years 1891 to 1898, 465 deaths, or 6 4 per cent, were notified with the term "drunkenness," as playing a part in the causation of death. These notifications are sent to each practitioner from the statistical office at Bern on receipt of the death certificate to be filled in for statistical purposes with numerous details as to sanitation, causation of death, &c., but not bearing the name of the patient on the return sheet, in order that professional secrecy may be ensured Of these 465 fatal cases, 397 referred to men and 68 to women 263 belonged to the working classes, and 178 or the high percentage of 40, to the educated classes The percentage as regards the ages of the men ran thus from 20 to 39 years of age, 10 6 per cent., from 40 to 59 years, 15 5 per cent, and over 60 years, 5 9 per cent. The 15 towns in question stood as follows. Fribourg, 11 2, Chaux de Fonds, 11 1, Locle, 9 6, Bern, 8 8, Lucerne, 8 2, Schaffhausen, 8 0, Geneva, 7 6, Neuchatel, 6 7, Zürich, 6 0, Winterthur, 5 3, Basle, 5 0, Lausanne, 4 8, Bern, 4 4, St Gall, 3 3, and Herisau, 2 9.

Clinical Meeting at Bern

On May 27th the clinical meeting was well attended, especially the opening lecture of Professor Kocher I can only report on the most interesting of the 20 cases demonstrated In cases of acute traumatic inflammation of the meniscus of the knee-joint he makes a small incision and performs the old operation of direct ignipuncture with the Paquelin cautery with best success. Skiagrams which were splendidly executed at the Roentgen establishment attached to the hospital proved of great use for diagnosis and treatment, especially in cases of fracture and dislocations. Thus in a case of total dislocation of the foot backwards with fracture or fissure of the malleoli a normal position was obtained through reduction after resection of the malleoli In cases of supra-condyloid fracture of the humerus in children as deviation of the small fragment is inevitable Professor Kocher advocates incision and suture of the bone with subsequent proper extension. Fractures of the lower extremity he does not keep in bed but treats with "Geh verbinde" in order to avoid muscular atrophy In cases of resection of the upper jaw and also of the tongue for malignant tumour he prefers a horizontal cut through the cheek to the usual incision under the eye in the one case and under the chin in the other A case of diphtheria with softening of the posterior wall of the trachea from the cannula being left in too long after tracheotomy when the patient had alarming attacks of dyspnœa was treated by transplantation of an osteo-periosteal flap of the clavicle The case did well and six months after the operation the boy was shown as remaining well Professor Sahli lectured on Angina Pectoris dealing with the diagnosis of true and spurious angina emphasising the importance of the evidence of high blood pressure as contra indicating the use of

digitalis, and recommending the nitrites and nitro-glycerine as therapeutic agents —Professor Tadassohn demonstrated some interesting cases, such as lichen ruber planus confined to the scrotum and the mouth, an "acrodermatite continue pustuleuse," apparently innocent but of very doubtful prognosis, and an erythema induratum (Bazin) in a scrofulous subject In lupus erythematosus he advises the exhibition of quinine in doses of from 20 to 60 grains a day for months or the external application of a mixture in equal parts of alcohol, ether, and spirit of peppermint

Zürich, May 29th.

ROME

(FROM OUR OWN CORRESPONDENT)

The Averting of Hail Storms

HAIL, the "horrida grando" of Virgil, the "dira grando" of Horace, has nowhere more than in Italy been felt as a scourge In 10 minutes the bursting of a hail cloud may convert a whole district, smiling with the promise of an abundant harvest or vintage, into a scene of desolation, leaving behind it economic ruin, hygienic harm, misery—individual and social—seldom even palliated by the heavy insurance which has already anticipated much of the hard-earned gains of the husbandman In London some 25 years ago a fog of almost unprecedented duration and density inflicted such damage, notably on a great cattle show held at Islington, that it was seriously proposed on future visitations of the kind to clear the air by artillery, even at the cost (as then estimated) of £10,000 The proposal, transferred to Italy and applied to her hail storms, has quite lately been energetically carried out—mainly on the lines recommended and practised in Styria by Signor Stiger At Turin a member of Parliament largely interested in agriculture, Signor Ottavi, has shown that the mortar used in Styria, and still more the "Unger cannon," also in use there, may be constructed in any well appointed Italian foundry—so simple are they in construction and operation The mortar, for example, with a charge of from 80 to 100 grammes of gunpowder, rammed in not very tightly and plugged at the mouth with a stopper of unseasoned wood, can when fired off in repeated volleys keep a hail cloud at bay and even break it up and disperse it Throughout Italy, but more particularly in the more robust, wealthier, more enterprising north, one reads of experiments tried with the most gratifying results in this new method of dispersion of hail Let me quote an instance just communicated to me In various districts of Monferrato in the Alta Italia a violent thunder storm accompanied by hail was devastating a series of upland farms at Trino Vercellese, Camino, Pontestura, and Quarti The storm was signalled to the people of San Giorgio Monferrato as "terrible," so they lost no time in preparing to give it a 'warm reception" They had quite a park of artillery prepared, the cannon, as described by Signor Ottavi, being in great force On came the storm-cloud and out flashed the volleys in rapid succession, till after two hours' bombardment the cloud revealed to the eye witnesses a large rent through which the blue sky was visible It thereafter drifted away, leaving the "colles apertos," of which, according to Virgil, "Bacchus" is so enamoured, in full possession of all their menaced riches and smiling at the destruction they had escaped Not a hailstone fell, but from the ragged edges of the retreating cloud there dropped a gentle and not unwelcome dew, hardly amounting to rain The vine dressers, turned artillerymen for the nonce, find the practice more amusing and less costly than insurance Of the two "charges" they prefer that of the "Unger cannon"

Three Deaths from Reckless Prescribing and Dispensing

I have had too frequent occasion to record the fatal results of the scandalously loose practice of prescribing orally and of dispensing without written instructions still prevalent in Italy and still jeopardising the lives not only of Italians themselves but of the stranger within their gates The criminal court of Tortona, a considerable town between Alessandria and Genoa, supplies the latest and not the least sensational instance in point Dr Giacomo Pezzotta, a medical practitioner, and Signor Francesco Beltrami, pharmaceutical chemist were put on trial, the former for having prescribed orally and without indicating the dose, the latter for having made up without prescription in writing a preparation of 'phosphorated cod liver oil' (*olio di fegato di merluzzo fosforato*) which, contained in a bottle and exhibited thereafter to three children for the period of four days and in the dose of one teaspoonful per diem, caused their speedy death from the excessive quantity of phosphorus ingested" The Public Prosecutor contended that Pezzotta's responsibility lay in the fact that he had entrusted the preparation of a drug containing a powerful poison to a pharmacist without the formulæ and instructions as to use which are required by law, and that Beltrami's responsibility consisted in his having made up the prescription "arbitrariamente" (arbitrarily) and handed it over to his client without indicating its composition and character, the dose in which it was to be taken, or indeed any of the precautionary marks insisted on by the "regolamento sanitario" The accused were defended by able counsel drawn from the Milanese and Bergamasque bars whose contention was that the true cause of the death of the first child had not been juridically proven and that the deaths of the other two were attributable to the negligence of those about them, not to the "imputati" (defendants) Numerous witnesses, including practitioners, professors, and chemists, were called on either side, the whole trial lasting over three days The court found for the prosecution that both Pezzotta and Beltrami were responsible and condemned the former to imprisonment for two months and 15 days with payment of a fine of 83 francs (£3 6s 8d) and the latter to five months' imprisonment and 750 francs (£30) fine Both parties were also amerced in costs As I have often put in evidence, such cases of criminal malpractice seem to survive the most exemplary retribution of the law and—if the supporters of the Santini Bill would only see it—explain and justify the misgivings with which an English speaking *clientèle* regards the consignment of its health (and more) to practitioners among whom such negligence is possible

"Rectores Magnifici" of Padua and Turin

The University of Padua has just elected as its "Rector Magnificus" its illustrious Professor of Clinical Medicine, Dr Achille De Giovanni—the retiring holder of that office He had 27 votes against 22 given for his rival Professor Nasini, lecturer on Chemistry For the similar post vacant in the University of Turin by the death of Dr Cesare Nani, Professor of Legal History, there are several distinguished candidates, among whom the medical names of Mosso and Bizzozzero have been mentioned

June 5th

EGYPT

(FROM OUR OWN CORRESPONDENT)

Plague in Alexandria

ALL readers of historical medicine know that plague was constantly present in Egypt from the days when Egypt and Greece were tottering towards decay and both shortly to become Roman provinces, until 1844 when Kinglake wrote his admirable "Eöthen" and taught our fathers and grandfathers the delights of Oriental travel The plague left England in the seventeenth century suddenly and with equal abruptness it disappeared from Egypt, though of late years it has often been in Tripoli, Arabia, and Uganda. Now after 55 years absence it is again in Alexandria and though its coming is still shrouded in some mystery it is assumed that it has reached us by some indirect channel from the Hedjaz Cholera has come to Egypt so often from the holy places that it seems not unfair to remember that plague has been present in Jeddah for three seasons and that there have been more than 100 deaths from it there during the last three months The modern Alexandrian story is as follows. On May 2nd a Greek boy, about 14 years of age, was admitted into the Greek Hospital with fever and a right axillary bubo Plague was suspected, but as the case was decided by the clinical and bacteriological experts not to fulfil all the necessary conditions and as there was no evidence of the disease then existing in Egypt it was not officially reported However, the medical officer of health took the precaution of tracing the patient's surroundings He lived in an ins

frequented by Jews and other travellers, none of whom could be traced to Jeddah or to the pilgrimage On May 16th another Greek was admitted into the Greek Hospital with a left axillary bubo, delirium, and a temperature of 105 8° F This proved to be an undoubted case of plague and was at once published Since then there have been six cases, all of bubonic plague—four natives and two Greeks—all living in the poorest quarters of the town and not far removed from each other, but the cases are not intimately connected There are also the stories usual in plague-time of rats having been seen sickly and dying without apparent cause So far the cases bear out the theory that the propagation of the disease depends more upon place infection than upon direct transmission from one individual to another All the eight cases, if we are to accept the original doubtful patient, have been of the bubonic type, and therefore much less infectious than the pneumonic or septicæmic variety To those who know nothing practically about plague it may be justifiable to point out for comparison that tubercle may be a local manifestation, such as "a post-mortem finger," or the bacilli may enter the bronchi and set up tuberculosis of the lung, or, again the microbe may directly enter the blood current and set up a general poisoning, acute miliary tubercle Of these three it is only the second which is dangerous from the contagious point of view Now, the plague bacillus may enter an abrasion on the hand or foot and produce local poisoning, evidenced by a bubo in the armpit or the groin, but the bacilli are safely locked up and cannot very well spread the disease, for when the bubo suppurates the pyogenic germs are found to have killed the plague cocci But if the coccobacillus enters the respiratory passages the pneumonic form is produced and the attendants are at once in danger If the microbe gets admission into the circulation an acute septicæmic variety occurs which usually kills the patient before he has much time to spread the disease

Prophylactic Measures

The Quarantine Board at Alexandria has had some special meetings and has decided by a large majority to insist upon the medical examination of all passengers and baggage before sailing from Alexandria and in addition the disinfection of the soiled linen of all third-class travellers A few Greeks have left the city for Europe, but there has been no general flight or panic Sir John Rogers and Pinching Bey are at Alexandria, superintending sanitary measures with their well known energy and Dr Bittar is also there to assist in bacteriological investigations The sick are rigorously isolated and their dwelling places are very carefully disinfected, some of their effects being destroyed, and their friends and associates are closely watched One of the patients was found to live in the house of a laundress and all her customers had to be inspected There is no plague in any other part of Egypt and there is no increase in the death-rate either in Alexandria or elsewhere Everything tends to the belief that the poison is localised and can be eradicated

The Pilgrimage

There has been no plague among pilgrims this year, no suspicion of it at Tor and the latest accounts all say that there is now no longer plague at Jeddah

Cairo, May 29th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT)

Convicts and Phthisis

AT the recent Prison Congress in New Orleans Dr Blake, physician inspector at the Alabama Penitentiary, called attention to the fact that phthisis is greatly on the increase in prisons in the South Taking his own State he quoted statistics to show that in 16 years the percentage of convicts dying from phthisis had risen from 17 per cent. to nearly 37 per cent, while during one year—1895-96—above 50 per cent of the deaths in the penitentiary had been from that disease Dr Blake quoted figures from Mississippi, Texas Georgia Virginia and other States, going to show that phthisis had steadily increased among the prison population In Texas in 1896 two-thirds of the total number of deaths of convicts were caused by phthisis The trouble, according to Dr Blake, lies in the fact that tuberculous and non tuberculous convicts are herded together Especially is this the case in the winter months when the greatest number of convicts is crowded into the smallest possible space in order to economise fuel and blankets

Conclusion of the Beef Court

The above court decides that the testimony is conclusive that both the refrigerated beef and the canned beef were in good condition when delivered to the Government and continued so until issued to the troops, except in special instances where the deterioration was due to accidental conditions in transportation or to the influence of the tropical climate The report admits the liability of refrigerated beef to taint quickly when removed from the ice chests The court finds the charges of "embalming" the fresh beef to have been unsubstantiated by the testimony, and says that no chemicals were used to preserve it It also finds that it would have been impracticable to secure beef on the hoof for the Cuban campaign The finding is likewise in opposition to the assertion of General Miles that the use of the beef was an experiment Much attention is given to the charges concerning the canned roast beef, and it is stated that the testimony proves it to have been wholesome and nutritious when used in moderation and under favourable circumstances The position is taken that too much of this article of food was supplied to the men and that under the circumstances it was unpalatable and found undesirable as a continuous ration The fact is set forth that the canned roast beef had not been used to any appreciable extent before the beginning of this war, and it is therefore regarded as an untried ration practically In view of this fact the Commissary General of Subsistence is criticised for the purchase of the meat in such extensive quantities. As to the character of the meat for wholesomeness and nutrition the reports of Professor Atwater and Professor Chittenden are quoted at length sustaining the claims in this respect The findings of the court are that the meat was not "doctored", that it was the beef of commerce, that there was no more neglect than was incident to the hurried preparations for war, that the inspection, while generally according to regulations, was not always up to requirements, and that the sickness of the troops was not to any great degree occasioned by the use of either the canned or the refrigerated beef In the opinion of the Army Commission the following facts sufficiently indicate the causes of disease. The principal reasons for the disease prevalent in the army were exposure to extreme alternations of daily temperature, to incessant downpours of rain, and to the malarial influences peculiar to the most dangerous portion of the island of Cuba at the unhealthiest season of the year Lack of shelter from sun and rain and irregular, inadequate, and insufficient supplies of food, fuel, and clothing, due to want of transportation, also entered as contributory causes of the sudden and alarming increase in the sick report which all accounts agree as having taken place between July 8th and 10th, and after the command had been subjected for some days to the fatigue and exposure incidental to the digging and manning of trenches, the maintenance of an outpost service, and the conduct of siege operations That the sickness was due to particular articles of ration rather than to the character and components of the ration itself and its general unsuitability to existing conditions is not clear This is shown by the fact that though there is a very marked difference in the meat components of the ration issued to and used by the different commands of the army the sick rate was very much the same in all A division, for instance, which subsisted largely on bacon and used no canned beef and but little refrigerated beef suffered as seriously from sickness as another division which used the canned fresh meat and received also considerable quantities of refrigerated beef. Having regard, therefore, to the testimony adduced as to the causes which are admitted to have operated to produce intestinal disorders, such as the eating of tropical fruits, the use of unboiled and unfiltered water, malarial poisoning, the exposure to daily rains and the considerable diurnal variations of the temperature and the like, the court finds it impossible to conclude that either the canned fresh beef or the refrigerated beef appeared to any considerable extent as causes of intestinal troubles

Mortality in the Philippines

Surgeon General Sternberg has just received from Manila a report giving the mortality record of the Philippines for the

five years ending 1898 It is based on official Spanish reports of the Christian population and those non-Christians who were Spanish subjects It shows that at Manila among 315,571 inhabitants the average mortality was 26 2 per 1000 At Iloilo it was 24 4 per 1000 In the island of Negros, among a population of 321,777, it was 22 4 per 1000 The lowest death rate was at Mariannas, it being only 10 4, while the highest, at Cagayan, was stated as 59 9 per 1000 Compared with statistics of other countries given by Professor Richmond Mayo-Smith of Columbia University the figures relating to the Philippines show that in some parts of the islands the death rate was exceedingly low, while in other parts it was very high. Professor Mayo-Smith said that the census of 1890 showed a death rate in the United States per 1000 of 17 for native-born whites of native parentage, 24 42 for native-born whites of foreign parentage, 19 85 for foreign born whites, and 19 57 for coloured people In 1893 the statistics showed the following death rates in the countries named Italy, 25 3, Germany, 24 6, England, 19 4, United Kingdom, 19 1 per 1000 With reference to the deaths of soldiers in tropical countries Professor Mayo-Smith says that the death rate in the British army in 1891 was 4 7 at home, 13 5 abroad In Ceylon 44 out of 1000 soldiers died in the first year, 48 in the second, and 49 in the third Out of 1000 soldiers in Jamaica 77 died during the first year, 87 during the second, and 93 during the third year

Hospital for Phthisical Sailors of the Merchant Marine

The Surgeon General of the Marine Hospital Service is making preparations for the treatment of all sailors of the merchant marine who are suffering from tuberculosis at the new marine hospital now in course of construction on the abandoned military reservation at Fort Stanton, New Mexico This reservation contains about 10,240 acres and the buildings on it are being repaired and will be fitted up as a sanatorium for the treatment of tuberculosis The hospital is to be furnished with modern hospital furniture and supplied with all modern instruments and apparatus for the scientific treatment of phthisis The benefit of the outdoor life in this climate which is so favourable is expected to have a most marked effect upon the patients It will be managed on the same plan as the National Soldiers' Home Light employment will be given to those who desire it and the many acres surrounding the hospital will be put under cultivation, the patients raising the better part of the necessities required for food

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THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION

THE fine weather during the past week brought out one great defect of the new Council chamber, the absence of all proper ventilation The effect of this is aggravated by the glass roof of the room, through which the rays of the sun stream down on the devoted members and especially on the President On Monday the temperature of the Council chamber was 75° F The members kept remarkably cool considering all things, but it is understood that before the session closes a committee will be appointed to deal with this question Mercifully, no pathological sequelæ have resulted so far, while it would almost seem as if the effect had been to favour the coolness and equanimity of the members

The session of the Council up to the time of our going to press retains the character of having been one of the liveliest and longest on record On the whole, the character of the debates has been well sustained The impending withdrawal of Dr Church on account of his election as President of the Royal College of Physicians of London is much regretted. His practical judgment and his firmness in contending for what he thinks right have been found very useful, especially in the Education Committee There are sister bodies which do not object to their presidents being on the General Medical Council, but the College in Pall Mall is very emphatic on this point Oxford University will be represented by Dr J F Payne in the next Council and the Royal College of Physicians of London will monopolise the statesman like and judicial qualities of Dr Church

Nearly three days were occupied in hearing penal cases and four names were removed from the Register On a future occasion we may have to point out some new features in the disciplinary action of the Council Meantime our readers will do well to scan pretty closely the cases dealt with The offences brought to light and the methods in dealing with them of the Council are both worthy of attention. In some cases the judgment of the Council has been deferred to give time for the abandonment of practices of which it disapproves—a very proper course, especially when the only alternative is immediate removal from the Medical Register with much uncertainty and difficulty as to restoration

The work of committees has seldom been more arduous than in the recent session. The Education Committee has sat three or four days almost consecutively The task of deciding on the merits of different preliminary examinations and of raising the standard all round is found to be a very difficult one, affecting many interests and exciting many fears of serious depletion of the medical schools Much praise is due in this connexion to Sir J Batty Tuke and to Dr Donald MacAlister, but many questions remain under consideration. More time is demanded and it is felt that an independent report from experts on the subjects in dispute will tend to allay irritation and objection. The Council has conceded both points We shall have to wait longer than was expected for the result, but it cannot fail to be more reliable when it comes This committee, too, has had to deal with the question of the recognition of science teaching in schools and the danger of losing one of the five years for medical study Here, it will be seen, it came into somewhat sharp conflict with the representatives of the English Conjoint Board. The conflict became more complicated by Dr Church, himself a member of the Education Committee, joining Mr Bryant and Sir Dyce Duckworth in defending the right of the corporations to fix the curriculum without consulting the wishes of the Council In the end the committee triumphed. Sir J Batty Tuke was no doubt right in his main contention, but went a little too far in charging the Conjoint Colleges of England with disloyalty to the General Medical Council They did not deserve this charge,

The work of the Committee upon the subject of Medical Aid and Friendly Societies, of which Dr Glover is chairman, will call for more particular notice There will be little difference of opinion as to the great importance of a board of conciliation for the settlement of questions in dispute between the profession and the friendly societies, and the committee will deserve the support and thanks of the profession if it can bring into the discussion for settlement, as Mr Bryant maintains it can the question of a wage limit. Scarcely less important is the resolution passed by the Council on the recommendation of the committee strongly disapproving of the systematic canvassing and advertising by which medical aid associations connected with insurance business are pushed

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On the name of the accused practitioner being called no response was made and accordingly the case proceeded in his absence

Mr FARRER, the Council's solicitor, said the notice of the inquiry had been given to Mr Shekleton in the usual way A summons had been duly served and a letter from Mr Shekleton showed that he had received the summons In this letter Mr Shekleton said he never knew Rowland

five years ending 1898 It is based on official Spanish reports of the Christian population and those non-Christians who were Spanish subjects It shows that at Manila among 315,571 inhabitants the average mortality was 26 2 per 1000 At Iloilo it was 24 4 per 1000 In the island of Negros, among a population of 321,777, it was 22 4 per 1000 The lowest death rate was at Mariannas, it being only 10 4, while the highest, at Cagayan, was stated as 59 9 per 1000 Compared with statistics of other countries given by Professor Richmond Mayo Smith of Columbia University the figures relating to the Philippines show that in some parts of the islands the death rate was exceedingly low, while in other parts it was very high. Professor Mayo-Smith said that the census of 1890 showed a death rate in the United States per 1000 of 17 for native-born whites of native parentage, 24 42 for native born whites of foreign parentage, 19 85 for foreign born whites, and 19 57 for coloured people In 1893 the statistics showed the following death rates in the countries named Italy, 25 3, Germany, 24 6, England, 19 4, United Kingdom, 19 1 per 1000 With reference to the deaths of soldiers in tropical countries Professor Mayo-Smith says that the death rate in the British army in 1891 was 4 7 at home, 13 5 abroad In Ceylon 44 out of 1000 soldiers died in the first year, 48 in the second, and 49 in the third Out of 1000 soldiers in Jamaica 77 died during the first year, 87 during the second, and 93 during the third year

Hospital for Phthisical Sailors of the Merchant Marine

The Surgeon General of the Marine Hospital Service is making preparations for the treatment of all sailors of the merchant marine who are suffering from tuberculosis at the new marine hospital now in course of construction on the abandoned military reservation at Fort Stanton, New Mexico This reservation contains about 10,240 acres and the buildings on it are being repaired and will be fitted up as a sanatorium for the treatment of tuberculosis The hospital is to be furnished with modern hospital furniture and supplied with all modern instruments and apparatus for the scientific treatment of phthisis The benefit of the outdoor life in this climate which is so favourable is expected to have a most marked effect upon the patients It will be managed on the same plan as the National Soldiers' Home Light employment will be given to those who desire it and the many acres surrounding the hospital will be put under cultivation, the patients raising the better part of the necessities required for food

May 18th.

Obituary.

JOHN GEORGE SINCLAIR COGHILL, M D, F R C P EDIN, M R C P LOND

DR. J G SINCLAIR COGHILL, who died at Ventnor, Isle of Wight, on June 5th, was a man of many attainments but was best known to the medical profession and the general public in connexion with his work at the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor He had for many years been senior physician to this hospital Dr Coghill was in his sixty fifth year and belonged to a Scotch family His father, who had been in a Highland regiment and had fought in Spain in the British Legion under General Sir George De Lacy Evans from 1835 to 1837, was a well known resident in Edinburgh some 40 years ago, a fine example of the retired military man, full of kindly humour and very popular among a wide circle of acquaintances Dr Coghill studied medicine in Edinburgh and had a distinguished career as an undergraduate, taking gold medals in anatomy, midwifery, and medical jurisprudence While he was still at class work the Russian war broke out, and he interrupted his studies to volunteer as a surgeon's assistant in the navy, the result being that he served in the Baltic Fleet and received a medal In 1857 he graduated as M D (with honours) at Edinburgh University, and in 1864 was admitted F.R C P Edin In 1858 he was appointed demonstrator of anatomy in Glasgow University under the late Professor Allen Thomson, in which capacity he proved himself an able lecturer and teacher In 1861 he resigned this position in order to proceed to Shanghai, his successor as demonstrator being Dr John Cleland who on Professor Allen Thomson's retirement in 1877 was appointed to the vacant chair Dr Coghill remained several years in Shanghai, becoming ultimately municipal medical officer and consulting physician to the General Hospital On his return to this country he temporarily conducted the midwifery class in Edinburgh University after the death of Sir James Simpson in 1870, and lectured on pathology and pathological anatomy in the Edinburgh Medical School from 1873 to 1876 He then joined the staff of the Royal National Hospital for Consumption where he spent the remainder of his life. An account of his method of treating phthisis will be found in a paper which was read by him in Berlin on May 26th at the International Congress on Tuberculosis and was published in THE LANCET of June 3rd (p 1479) His first contribution to our columns appeared just 40 years ago It was a report of an operation for vesico-vaginal fistula and was printed in THE LANCET of May 7th, 1859 Later in the same year he published in our columns a course of lectures on the Peripheral Nervous System delivered in Glasgow University Dr Coghill was a Vice-President of the British Gynæcological Society and a Vice-President (Section of Therapeutics) of the ninth International Medical Congress held at Washington in 1887 His death was sadly sudden On his return from Berlin on June 2nd, apparently in perfect health, he was seized suddenly with gastro-intestinal disturbance This was followed on June 3rd and 4th by hæmatemesis and melæna, and on June 5th symptoms of perforation of the stomach supervened, from which he died

WILLIAM ROOCROFT, J P, M R C S ENG, L S A

A PROMINENT and well known figure has been removed from amongst the medical men of Wigan by the death of Mr William Roocroft which occurred at Brondesbury villas, Kilburn, London, on May 28th Deceased was in his seventieth year He was born at Coppull, near Wigan, on July 5th, 1829, and was educated at Standish Grammar School under the Rev Mr Price He became a student of the Liverpool School of Medicine and afterwards of King's College, London, qualifying in 1852, when he became a M R C S Eng and L S A Lond The same year he was appointed house surgeon to the then existing Wigan Dispensary—a post he held until he commenced practice on his own account in 1854 He became known in the district as an operating surgeon and soon became surgeon to several large collieries and clubs in the town He was one of the honorary medical officers to the Royal Albert Edward Infirmary, Wigan, retiring in 1884, when he was placed on the consulting staff, his place on the acting staff being filled by his son, Mr William Mitchell Roocroft Mr Roocroft was a keen sportsman and was for 30 years a member of the Aspull Hunt He was a member of the Wigan Town Council for a few years, but suffering defeat in 1868 he never again sought re-election In 1870 he was placed on the Commission of Peace for the borough of Wigan and for a long period took an active part in magisterial work, often acting as presiding magistrate He was a man of striking personality, brusque in manner, never hesitating to give expression "to the faith that was within," sometimes to the annoyance of his friends, but with all this he was a most sociable friend Being one of the old school of general practitioners and holding no medical degree he would rightly insist on being called "Mr" (and not "Dr") Roocroft, sometimes to the amusement of his younger professional friends who loved to hear him emphasise the term "Mr" Mr Roocroft, who was joined in practice by his son (Mr W M Roocroft), had been in failing health for the past four or five years and two years ago left Wigan for the south of England, passing part of the time in Eastbourne and the last few months at Kilburn, where he died, leaving a widow, one son, and a daughter

DEATHS OF EMINENT FOREIGN MEDICAL MEN—The deaths of the following eminent foreign medical men are announced —Dr A. Ziegler, Chief Surgeon of the Swiss army —Dr Giovanni Inverardi, Professor of Midwifery and Gynæcology in the University of Padua.—Dr A Zinnis, Professor of Children's Diseases in the University of Athens —Dr Affonso Ramos, Director of the Federal Bacteriological Laboratory, Brazil —Dr Ezequiel Correia dos Santos, formerly Professor of Pharmacology in the Rio de Janeiro University —Dr R H Plummer, Professor of Anatomy in the Cooper Medical College, San Francisco

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION

THE fine weather during the past week brought out one great defect of the new Council chamber, the absence of all proper ventilation The effect of this is aggravated by the glass roof of the room, through which the rays of the sun stream down on the devoted members and especially on the President On Monday the temperature of the Council chamber was 75° F The members kept remarkably cool considering all things, but it is understood that before the session closes a committee will be appointed to deal with this question Mercifully, no pathological sequelæ have resulted so far, while it would almost seem as if the effect had been to favour the coolness and equanimity of the members

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The session of the Council up to the time of our going to press retains the character of having been one of the liveliest and longest on record On the whole, the character of the debates has been well sustained The impending withdrawal of Dr Church on account of his election as President of the Royal College of Physicians of London is much regretted. His practical judgment and his firmness in contending for what he thinks right have been found very useful, especially in the Education Committee There are sister bodies which do not object to their presidents being on the General Medical Council, but the College in Pall Mall is very emphatic on this point Oxford University will be represented by Dr J F Payne in the next Council and the Royal College of Physicians of London will monopolise the statesman like and judicial qualities of Dr Church.

Nearly three days were occupied in hearing penal cases and four names were removed from the Register On a future occasion we may have to point out some new features in the disciplinary action of the Council. Meantime our readers will do well to scan pretty closely the cases dealt with The offences brought to light and the methods in dealing with them of the Council are both worthy of attention In some cases the judgment of the Council has been deferred to give time for the abandonment of practices of which it disapproves—a very proper course, especially when the only alternative is immediate removal from the Medical Register with much uncertainty and difficulty as to restoration

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The work of committees has seldom been more arduous than in the recent session The Education Committee has sat three or four days almost consecutively The task of deciding on the merits of different preliminary examinations and of raising the standard all round is found to be a very difficult one, affecting many interests and exciting many fears of serious depletion of the medical schools Much praise is due in this connexion to Sir J Batty Tuke and to Dr Donald MacAlister, but many questions remain under consideration. More time is demanded and it is felt that an independent report from experts on the subjects in dispute will tend to allay irritation and objection The Council has conceded both points We shall have to wait longer than was expected for the result, but it cannot fail to be more reliable when it comes This committee, too, has had to deal with the question of the recognition of science teaching in schools and the danger of losing one of the five years for medical study Here, it will be seen, it came into somewhat sharp conflict with the representatives of the English Conjoint Board. The conflict became more complicated by Dr Church, himself a member of the Education Committee, joining Mr Bryant and Sir Dyce Duckworth in defending the right of the corporations to fix the curriculum without consulting the wishes of the Council In the end the committee triumphed Sir J Batty Tuke was no doubt right in his main contention, but went a little too far in charging the Conjoint Colleges of England with disloyalty to the General Medical Council They did not deserve this charge.

The work of the Committee upon the subject of Medical Aid and Friendly Societies, of which Dr Glover is chairman, will call for more particular notice There will be little difference of opinion as to the great importance of a board of conciliation for the settlement of questions in dispute between the profession and the friendly societies, and the committee will deserve the support and thanks of the profession if it can bring into the discussion for settlement, as Mr Bryant maintains it can, the question of a wage limit Scarcely less important is the resolution passed by the Council on the recommendation of the committee strongly disapproving of the systematic canvassing and advertising by which medical aid associations connected with insurance business are pushed

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A very good thing was done on Wednesday on the motion of Dr Bruce The Penal Cases Committee was enlarged The proposal to do this has often been made before unsuccessfully The responsibilities of this committee are great and it was scarcely large enough for its work

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We have referred to the burden and heat of the day and have indicated the patience with which these have been borne by the members of the General Medical Council. It is gratifying to know, if rumour may be trusted, that the severity of their labours has been varied by some pleasant social gatherings At least two very genial banquets must be mentioned, of which the respective hosts were the President of the Royal College of Physicians of London and the President of the General Medical Council At the latter the Clerk of the Privy Council and the Presidents of the Royal Colleges were present, as were also Mr Wheelhouse, Sir Walter Foster, Sir William Priestley, and others

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THURSDAY, JUNE 1ST

THE Council met to-day, Sir WILLIAM TURNER, President being in the chair, and resumed the work of the session

The Case of Samuel Bingham Shekleton

The Council proceeded to the consideration of the case of Samuel Bingham Shekleton, of 17, Compton avenue, Barking road, East Ham, registered in Ireland Nov. 26th, 1874, as Lic R Coll Surg Irel., 1872, who had been summoned to appear before the Council to answer the following charges as formulated by the Council's solicitor —

1. *That* in the year 1895 he aided and assisted an unqualified person named Julian Averfield Rowland to procure himself to be registered under the Medical Act, 1858, under the name and with some of the registrable qualifications of one Edward Joseph Nugent, by making and producing false and fraudulent representations, 2. That he aided and assisted the said unqualified person to assume the position of a duly qualified and registered medical practitioner and to carry on medical practice as though he had been duly qualified. The false representation above mentioned is contained in the application for registration forwarded by the said Julian Averfield Rowland in the name of the said Edward Joseph Nugent, to the Irish Branch Council, dated June 25th, 1895 which contains a certificate of identity of the said date signed by him (Shekleton).

On the name of the accused practitioner being called response was made and accordingly the case proceeded absence

Mr FARRER, the Council's solicitor, said ame the inquiry had been given to Mr Shekle tant way A summons had the Mr Shekleton showed o the In his letter Mr

proper

under any other name than Nugent and he signed the paper to assist him to get on the Register, fully believing him to be Nugent He never assisted him in any other way beyond this, that he resided for a time in Rowland's house

Dr BATEMAN, of the Medical Defence Union, then addressed the Council in support of the charge He explained how suspicion came to be directed against Rowland and how proceedings against him were thwarted by the fact that he got admission to the Medical Register, and how in the end he was tried and convicted at the Old Bailey for false impersonation and sentenced to three years' imprisonment Dr Bateman further presented to the Council certain circumstances which he claimed showed that Mr Shekelton was aware of the real identity of Rowland

While the members of the Council were deliberating in private on the case information was received that Mr Shekleton had presented himself at the office The Council resumed proceedings in public and gave Mr Shekleton an opportunity to explain At the outset, in answer to the PRESIDENT, he admitted that he had written a letter stating that he would attend at 2 o'clock—the hour named in the Council's summons—but he was sorry he could not be present earlier owing to miscalculation of the time required to reach the Council's offices by train and omnibus

The PRESIDENT said that Mr Shekleton must consider it an act of grace on the part of the Council to allow him an opportunity to be heard, particularly as his non appearance at 2 o'clock would tend to disarrange the whole procedure

Mr SHEKLETON again expressed regret and in reference to the charge against him said that he could not give more explanation than he had given in the letter which he had sent to the Council He was perfectly aware that the charge was a very serious one against his personal conduct In answer to further questions he stated that he first knew the man named in the charge some 20 years ago when he was in Gloucestershire He knew him then only as "the doctor" He was a medical assistant then and he was on speaking terms with "the doctor" It was not until 1890 that he knew his name was Nugent In that year he saw him at his house in Dumbarton road where he was in practice under the name of Nugent He had signed the papers in the full belief that he was the man When the papers were presented to him he had asked how many years had elapsed since he first knew Nugent and had received the reply that it was at least 16 years He had then said that he could conscientiously sign that he had known Nugent about 16 years Yet he certainly had not known this man for 16 years as Nugent He had never known him in connexion with Woolwich He admitted that the certificate he had given said that he had so known him The certificate was entirely in his handwriting No doubt it was written at Nugent's—the supposed Nugent's—dictation. The man had been in practice for eight years under the name of Nugent He had never heard the name of Rowland in connexion with this man and never had had the slightest suspicion that he was not Nugent

Strangers were ordered to withdraw and the Council deliberated on the case in private On the readmission of the public

The PRESIDENT announced that the resolution the Council had come to was —

(a) That the Council do proceed at once to pronounce its judgment on the case (b) that the charge made against Mr Samuel Bingham Shekleton has been proved to the satisfaction of the Council and (c) that the Council do now judge Mr Samuel Bingham Shekleton to have been guilty of infamous conduct in a professional respect and do direct the Registrar to erase from the Medical Register the name of Mr Samuel Bingham Shekleton

Mr SHEKLETON withdrew

The PRESIDENT said he had received two resolutions in connexion with the decision just arrived at

Dr CHURCH thereupon moved —

That the result of this day's inquiry *re* Samuel Bingham Shekleton together with a copy of the papers brought before the Council, be communicated to the proper authorities of New South Wales, drawing attention to the statement that Edward Joseph Nugent has been placed on the Colonial Register and is now practising in New South Wales and further to the fact that his name has been erased under Section XIV of the Medical Act, 1858, from the Medical Register of the United Kingdom.

This motion was agreed to

Sir WILLIAM THOMSON moved "That the Council hereby Univers of the action of the Executive Committee in 1858 he w[illegible]rom the Register the name of Edward Joseph University under [illegible] K Q C P I"

capacity he proved himself a[illegible] ere not called upon to In 1861 he resigned this position [illegible]

The PRESIDENT said that in his opinion the motion was unnecessary. Why should they put in their minutes a special motion approving of their doing their duty?

After some further remarks the motion was rejected by 12 votes to 10

Mr HORSLEY asked if this vote meant that the Council disapproved of the action of the Executive Committee

Dr MCVAIL Most undoubtedly

Dr MACALISTER We cannot go into what was in the mind of those who voted against the resolution

Mr HORSLEY Pardon me, Dr MacAlister, but my question was addressed to the President and not to you I ask the President to rule whether we are to regard the negativing of the resolution just rejected as meaning that the Council disapproves of the action of the Executive Committee, because if so I should like at some later period of the session to put ourselves right

The PRESIDENT I understand that those who voted for the motion did not disapprove of the action of the Executive Committee, but I cannot interpret the opinion of those members of the Council who opposed the motion

Mr HORSLEY I must say that if you are entitled to interpret the minds of some of us you are entitled to interpret the minds of the rest of us

The PRESIDENT I would not go so far as that

Mr BROWN I should like names to be taken down

Cries of "No, no," greeted this request and the Council proceeded to hear the next case on the programme.

The Case of James Jerome McKay

The Council proceeded to the consideration of the case of James Jerome McKay, of 154A, Wandsworth road, S W, registered in England, July 17th, 1876, as of Bally Roberts, Fermoy, County Cork, Mem Roy Coll Surg Eng, 1876; Lic Roy Coll Phys Lond, 1877, who had been summoned to appear before the Council to answer the following charge as formulated by the Council's solicitor —

That having, as a registered practitioner undertaken, on the order of the coroner to make a proper and complete post-mortem examination of the viscera, head, chest, and abdomen of the body of a dead child named Ernest Mackenzie for the purpose of ascertaining and informing the Coroner's Court of the cause of the death of such child, and not only failed to make the examination which was required, and failed and omitted to ascertain the cause of death, but subsequently deposed before the Coroner's Court (contrary to the facts) that he had ascertained the cause of death by making a complete and careful examination of all the organs of the deceased child. The documents forwarded to the General Medical Council in support of the complaint consist of the information in writing of the said coroner, dated Feb. 4th, 1899, and a certified copy of the depositions taken at the inquest on the death of the said child on Dec. 9th and 12th, 1898. Complaint is also made of Mr McKay's conduct by the Medical Defence Union and they will conduct the case and tender the coroner as a witness.

Mr MCKAY attended in answer to the summons and in reply to a question by the PRESIDENT as to whether he was accompanied by a solicitor or counsel he stated that he was not, but he appeared in support of his own case.

Dr BATEMAN, who appeared for the Medical Defence Union, stated that Mr Braxton Hicks the original complainant, would be unable to attend and that he undertook to conduct the case on his behalf and that of the Medical Defence Union

Mr FARRER, solicitor to the Council, read the charge against the accused

Dr BATEMAN in stating the case mentioned that Mr McKay had been committed for perjury by the coroner, but when the case was tried before Mr Plowden, one of the metropolitan magistrates, that gentleman had treated the matter as one of dispute between two medical men and had dismissed the summons The charge of perjury brought before Mr Plowden was a criminal charge That which was now brought before the General Medical Council was a civil charge The accused could not successfully plead that having been acquitted by Mr Plowden of the charge of perjury he could not be guilty of the charge under which he was now summoned

The PRESIDENT said to Mr McKay that he could now state his case and produce his proof

Mr MCKAY said that since he was before Mr Plowden he had not been in practice The charge was preferred against him by the Crown and on a judicial examination he was found to be an innocent man He did not want to say a word against the coroner but he must ask this, Why did not the coroner give him the chance to be present at the second post-mortem examination?

The PRESIDENT You were not asked to be present at the second post-mortem examination?

Mr MCKAY I was not

Mr TEALE Was that the ground on which you were acquitted?

Mr MCKAY I cannot tell

Mr HORSLEY wanted to know whether Mr McKay would abide by an answer previously given by him that he was perfectly sober when sent for to attend the second post-mortem examination

Mr MCKAY Perfectly sober on that day, sir

Mr HORSLEY Then I would ask if Mr McKay fully understood the gravity of the matter?

Mr MCKAY I certainly did, as I stated in open court.

The PRESIDENT You realised the position you were in?

Mr MCKAY Certainly sir

The PRESIDENT Is it your defence that Mr Plowden disposed of the matter?

Mr MCKAY I am telling you the truth so far as I am concerned

The Council deliberated on the case in private On the readmission of the public the PRESIDENT announced that the decision was as follows —

(1) That the Council do proceed at once to pronounce its judgment on the case (2) that the charge made against Mr James Jerome McKay has been proved to the satisfaction of the Council and (3) that the Council do now judge Mr James Jerome McKay to have been guilty of infamous conduct in a professional respect and do direct the Registrar to erase from the Medical Register the name of Mr. James Jerome McKay

The Board of Education Bill

On the motion of Dr MACALISTER, seconded by Mr BRYANT, the following report was adopted —

The Business Committee beg leave to report that a communication addressed to the President by the Honorary Secretary of the Royal Institute of Public Health has been referred to them as being of the nature of a petition On examination it appears that the communication has been addressed to the Medical Council under a misapprehension, as the Council is not a medical corporation in the sense intended by the writer The Committee recommended that the President be requested to send a reply to the foregoing effect.

The request from the Royal Institute of Public Health was that the General Medical Council should petition Parliament in favour of the appointment of a medical officer under the Board of Education Bill—a measure which has already passed the House of Lords

Midwifery Certificates

Dr MACALISTER, as chairman of the Business Committee, laid on the table copies of a memorial, dated March 30th, 1899, signed by 385 persons on the subject of the alleged improper conduct' of registered practitioners by participating in the issue to persons not medically registered of diplomas or certificates testifying, or implying, or that may be used to testify or imply proficiency in departments of medicine, surgery, or midwifery

The Case of William Stewart

The Council proceeded to consider the case of William Stewart of Denton, near Manchester, registered in Ireland May 19th, 1887, as M D Mast Surg, 1887, R Univ Irel., who had been summoned to appear before the Council to answer the following charge as formulated by the Council's solicitor —

Complaint has been lodged with the Council by the Ashton under-Lyne District Medical Society in relation to the Denton and District Provident Dispensary by whom he (Stewart) is engaged as medical officer and by whom an unqualified person named Burgess is engaged or employed as his assistant. The complaint is that he (Stewart) associates with the said unqualified person in the practice by him (Burgess) of medicine and surgery and permits him to carry on medical practice and is party to his administering medical aid and treatment to patients as if he were a duly qualified medical man.

Mr H Hyde solicitor, attended on behalf of the Ashton-under Lyne and District Medical Society in support of the charge.—Dr Stewart appeared in answer to his summons, together with his counsel, Mr H Shawcross, and his solicitor Mr J Bond.

Mr FARRER, solicitor to the Council, having read the charge

Mr HYDE opened the case on behalf of the complainants He pointed out that the dispensary with which Dr Stewart was connected issued a report in which Mr Burgess was described as Dr Stewart's medical assistant and that there was good ground for believing that Dr Stewart under cover of this dispensary connexion aided Mr Burgess to practise on his own account, notwithstanding that Mr Burgess was unqualified

Mr SHAWCROSS, on behalf of the accused, read the declarations which had been made in answer to those put in by the prosecution, contending that the whole of the so-called evidence against Dr Stewart was only hearsay, evidence and in a regularly constituted law court would at once be rejected as absolutely worthless

Dr STEWART was then called and examined He emphatically denied any employment by him of Mr Burgess as an assistant either when he was operating or at any other time Mr Burgess, he testified, was a dispenser and only that. He attended for some time at Hooleyhill Dispensary and then for a longer time at the central dispensary at Denton, but in both cases only to dispense such medicines as he (Dr Stewart) had prescribed for patients whom he had seen In his letter he had admitted that Mr Burgess had been with him in his attendance on certain cases, but all that he had done was practically to clean the instruments after the operation Mr Burgess had a great deal of time free, having nothing to do between 11 o'clock A M. and 5 P M, and possibly he had made a great many friends in the district But he (Dr Stewart) could not control Mr Burgess during the latter's hours of leisure Still, he had never with his (Dr Stewart's) consent or knowledge visited any persons as a medical practitioner Mr Burgess had had some medical education He was not a graduate, but he had attended a full college course He could not say whether Mr Burgess had passed the qualifying examinations However, he had looked upon Mr Burgess not as a medical student but as a dispenser and no more

Further consideration of the case was adjourned and the Council resolved to meet at the usual hour on the following day

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FRIDAY, JUNE 2ND

The Council resumed to-day, Sir WILLIAM TURNER being in the chair

The Case of William Stewart

The Council proceeded with the consideration of this case.

Dr STEWART, in answer to further questions, said that, generally speaking, he was on good terms with the rest of the profession in his neighbourhood. The affairs of the dispensary were managed by a committee which he understood consisted of 13 members and which appointed Mr Burgess without consulting him and without his knowledge. Mr Burgess had never attended an obstetrical case to his knowledge nor was he aware that Mr Burgess had any private practice He knew that the committee had not encouraged Mr Burgess in any way to attend patients, in fact, he was supposed to do nothing beyond dispensing

The Council deliberated on the case, being *in camera* for quite an hour and a half

The PRESIDENT announced the decision arrived at Addressing Dr Stewart he said he thought that that gentleman would recognise from the time that the Council had taken to deliberate over the case that they had given very great consideration to it He was instructed by the Council to tell Dr Stewart that the charge made against him had been proved to the satisfaction of the Council, but he was further asked to point out that the Council took a grave view of the charge proved against him, that the offence was one which the Council might adjudge to be infamous conduct in a professional respect, that inasmuch as the case was one of the first of its kind which had come before the Council they postponed delivering their final judgment, and that accordingly they had adjourned the further consideration of his case until November next, and he was advised to reconsider in the meantime his position

Dr STEWART May I ask any questions?

The PRESIDENT No, you do not require to do so This is the Council's decision.

The Case of Neville Holland

The Council proceeded to consider the case of Neville Holland of 3, Durham street, Lambeth, registered in England August 2nd, 1870, as Lic. Soc Apoth. Lond, 1869, Mem R. Coll Surg Eng, 1870, who had been summoned to appear before the Council to answer the following charges as formulated by the Council —

(1) That he associated himself with an unqualified person of the name of Blumenthal at a surgery carried on at 121, Tyers-street, London, and aided and assisted such unqualified person in the carrying on by him of a medical practice (2) that he assisted in and was a party to, attracting practice to the said surgery by public advertisements and (3) that he had violated the undertaking given by him to the General Medical Council in the month of November 1886, that if his name was restored to the Medical Register he intended to act as an assistant to a registered practitioner on the faith of which undertaking the General Medical Council permitted his name to be restored to the Medical Register

The information and complaint were lodged by the coroner for South West London and by the Medical Defence Union

Mr. Braxton Hicks, the coroner, and Dr. Bateman, the secretary of the Medical Defence Union, attended in support of the charges Mr Holland appeared for himself The charges were read by Mr Farrer

Dr BATEMAN, in the absence at the outset of Mr Braxton Hicks, opened the case against Mr Holland He mentioned that the latter's name had been erased from the Medical Register in 1895, and he had given the undertaking referred to in the charge when he applied for restoration in the year following The present proceedings had been instituted because of what occurred in connexion with an inquest held in January last

Mr BRAXTON HICKS continued the opening of the case and read certain depositions taken at the inquest referred to He thought the Council would agree that he was justified in asking whether Mr Holland's conduct was not unprofessional conduct It was impossible for him to wink his eye at it and say that the accused was not covering an unqualified assistant If Mr Holland could not keep a practice of his own the Council should not allow him to cover an unqualified man It was a danger to the public if this was to be allowed

The depositions referred to and a business card were put in The latter offered advice and medicine for 4d and midwifery attendance for 15s.

Mr HOLLAND tendered himself as a witness on his own behalf

The statement made by him in answer to the charges was read by Mr MUIR MACKENZIE In this it was stated that Mr Blumenthal had a chemist's shop and wished a medical man to attend at it daily If Mr Blumenthal attended to any patients it was without his (Mr Holland's) knowledge or consent Mr Blumenthal never did attend to a patient with his consent or connivance There were other instances of chemists' shops in London where medical men attended daily With reference to the charge as to advertising he did distribute some handbills, but he was not aware that the Council objected to the distribution of such advertisements on a man's first coming to a dispensary.

In answer to the PRESIDENT

Mr HOLLAND said that his statement was correct and he had nothing to add to it and no further observation to make

Mr BRAXTON HICKS and Dr BATEMAN stated that they had no wish to ask Mr Holland any questions No member of the Council desired to put any questions

Mr Holland and strangers having by direction of the PRESIDENT withdrawn the Council deliberated on the case *in camerâ*

On the readmission of the public the PRESIDENT intimated to Mr Holland that the charges made against him had been proved to the satisfaction of the Council who now judged him to have been guilty of infamous conduct in a professional respect and directed the Registrar to erase his name from the Medical Register

Mr HOLLAND asked if he still could attend midwifery cases

The PRESIDENT I am sorry I cannot advise you

Mr HOLLAND Where can I get advised?

The PRESIDENT I am afraid I cannot give you any advice on the matter.

Mr HOLLAND Can I act as assistant to a medical man? I have the opportunity of becoming an assistant, and I want to know in what capacity I can act now that my name is erased from the Register?

The PRESIDENT I have already said that I am not in a position to advise you

The Case of William Henry Cossens.

On this case being called, and Mr Cossens having appeared with his solicitor, it was agreed, on the motion of Dr McVAIL, seconded by Dr. HERON WATSON, to proceed with its consideration *in camerâ* When the public were readmitted

The PRESIDENT announced that the Council had considered *in camerâ* the case of William Henry Cossens, of Derby street, Prescot, Lancashire, registered in England on Oct. 22nd, 1886, as Lic Soc Apoth Lond., 1885, who had been convicted of a misdemeanour at the Liverpool Assizes on Nov. 28th, 1898, and that on question put from the chair it had been resolved that William Henry Cossens, having been proved to have been convicted of misdemeanour the Registrar be directed to erase his name from the Medical Register

The Council adjourned.

SATURDAY, JUNE 3RD

The Council met again to-day, Sir WILLIAM TURNER presiding

The Case of Henry Rowton

The Council proceeded to the consideration of this case which had been adjourned from the last session.

At the last session the Dental Committee reported the facts of the case as follows—viz that Henry Rowton was registered in the Dentists' Register on Nov 12th, 1878, as having been in practice before July 22nd, 1878, in connexion with pharmacy, that his address was 109, Hall street, Dudley, that he was also registered in the Chemists' and Druggists' Register as having been in business before 1868, that on May 2nd, 1898, he gave and signed a certificate of death in the terms following "This is to certify that Edward Fisher, aged three days, died on May 2nd, 1898, the cause of death debility from birth convulsions", that on July 23rd, 1898, Mr Rowton having been asked by the solicitor to explain his conduct wrote the following letter "I do not attend patients or pretend to be a medical man The children were brought to my shop and I told them to get a note from the parish doctor or one from the dispensary, which I suppose they neglected doing The so-called certificates were information for the Registrar, which he has often sent for", and that a letter was read from Mr Rowton's solicitor stating that his client undertook never again to issue any documents which could be considered to be medical certificates or to attend any patients as a medical practitioner The Dental Committee added a recommendation that no further action be taken in the matter and the decision of the Council was to adjourn the case until the present session

Mr FARRER informed the Council that both Mr Rowton and Mr J D Price, who was the complainant, had received notice that the case would be considered to-day, but no answer had been received from either of them

After the Council had deliberated *in camerâ* the PRESIDENT announced that they had come to the following decision in the case—viz That the Council, taking into consideration the undertaking made on behalf of Mr Henry Rowton that he will never again issue any documents which can be considered to be medical certificates or to attend any patients as a medical practitioner, resolves to proceed no further in regard to the charge found to be proved against him

The Case of Clement Maguire Kershaw

The Council then considered the case of Clement Maguire Kershaw in regard to whom the Dental Committee had found the following facts—viz The case of Clement Maguire Kershaw having been referred to them to ascertain the facts in regard to such case the Dental Committee find the facts, either admitted or proved, to be as follows —

1. Clement Maguire Kershaw was registered in the Dentists' Register on July 22nd, 1891, under the 37th Section of the Dentists Act, without any diploma. His registered address is at Newtown, in North Wales. 2. The said Mr Kershaw has a dental surgery at Newtown. He has also a branch practice which is carried on at Llanidloes, which is some miles distant from Newtown. 3. Mr Kershaw formerly had branch practices at Welshpool and Llanfair, but these had been given up some time before the date of the complaint made against him. 4. Mr Kershaw has had for five and a half years, and has now in his employment at a salary, an unregistered and unqualified person named Victor Neighbour From time to time this unqualified person has been permitted by Mr Kershaw to perform the operations of extracting teeth for patients and filling the teeth of patients with plastic fillings in the absence of Mr Kershaw In one case the said Victor Neighbour performed a dental operation on a patient under chloroform in the absence of Mr Kershaw it being stated that Mr Kershaw was ill at the time. The chloroform was not administered by Victor Neighbour 5. The said Victor Neighbour has been permitted by Mr Kershaw to see patients independently of him and to do more than fell within the province of a mechanical assistant.

The PRESIDENT announced that the Registrar had received a letter from Mr Maurice, the complainant in the case, saying that he was not going to appear that day

Mr MUIR MACKENZIE read the report of the Dental Committee given above and Section 15 of the Dentists Act of 1878 bearing on the case The section says "The General Council shall for the purpose of exercising in any case the powers of erasing from and of restoring to the Dentists Register the name of a person or an entry, ascertain the facts of such case by a committee of their own body not exceeding five in number, of whom the quorum shall be not less than three, and a report of the committee shall be conclusive as to the facts for the purpose of the exercise of the said powers by the General Council"

Mr R. A. GERMAINE, barrister, addressing the Council on behalf of Mr Kershaw, said he had no intention to dispute

the facts set forth in the report of the Dental Committee but he would ask the Council to consider that there were other facts which though, perhaps, not necessary for the committee went very considerably in mitigation or palliation of the offence He might say that the finding of facts by the committee was very much less than the actual accusation when first brought before the Council It was alleged against Mr Kershaw that on several occasions he had allowed operations under chloroform to be performed by Mr Neighbour, but when the accuser, Mr Maurice, appeared before the committee he was only able to produce a single instance Further, he asserted that the accusation would never have been brought against Mr Kershaw by Mr Maurice had not the former refused either to buy the business of the latter or enter into a partnership with him unless he undertook to produce his books, which apparently Mr Maurice was reluctant to do As for Mr Neighbour he might say that he was a gentleman of good training and long experience After he had been for a short time with Mr Kershaw he was introduced to Mr R Snow as an unqualified man As to the charges of extracting teeth and inserting plastic fillings he asserted that it had long been a practice in the dental profession for unqualified assistants to do these things He understood that a circular in opposition to this practice had recently been issued by this Council, but a copy of that circular had not reached Mr Kershaw, though he might say that since the inquiry before the committee Mr Kershaw had caused Mr Neighbour to discontinue the practice With regard to the chloroform case he might say that Mr Kershaw was ill in bed when the summons came and he told Mr Neighbour to go and see what could be done and make an appointment for him on another day Mr Neighbour found the patient, a young girl, in great pain and anxious on that account and because she wished to return to her employment to have the tooth extracted Mr Snow had also been called in and great pressure was put upon Mr Snow and Mr Neighbour by the girl herself and by her mother to have the operation performed Yielding to this pressure Mr Neighbour performed the operation and Mr Snow administered the anæsthetic When Mr Neighbour returned to Mr Kershaw and told him what he had done he, to use Mr Neighbour's own phrase, "blew him up" and told him he ought not to have done it He would put in the statutory declarations of three medical men of position who knew Mr Kershaw and his patients to the effect that on no occasion had Mr Neighbour extracted teeth in their presence when chloroform was administered without Mr Kershaw being present In all the circumstances he hoped the Council would be satisfied that Mr Kershaw had not willingly been guilty of any conduct which could be described as infamous in a professional respect

After the Council had deliberated *in camera*

The PRESIDENT announced to Mr Kershaw that they had determined to adjourn the further consideration of the case until the next session of the Council He had to point out to Mr Kershaw that the Council regarded such professional dealings as had been brought to their notice in connexion with the case very seriously and that they had expressed their views on the subject in a notice which they had issued A copy of the notice would now be given to Mr Kershaw and he would have until November to reconsider his position in regard to the *employment of unqualified* assistants and when he came before them in November he would have to satisfy the Council upon the matter

Reciprocity of Medical Practice.

The next business on the programme was the adjourned consideration of the report of the Executive Committee on the subject of the revision of the memorandum on Reciprocity of Medical Practice in relation to foreign countries Exception was taken to certain portions of the revised memorandum and after a short discussion it was agreed to refer the whole matter back to the Executive Committee

The Disciplinary Powers.

The next business was to receive the following interim report by the President on answers received from the medical authorities relating to increased penal and disciplinary powers.

INTERIM REPORT TO THE COUNCIL BY THE PRESIDENT, ON THE STEPS TAKEN BY HIM TO SECURE INCREASED POWERS FOR PENAL AND DISCIPLINARY PURPOSES UNDER SECTION 29 OF THE MEDICAL ACT 1858.

The PRESIDENT has to report that in November, 1898, in accordance with a request of the Executive Committee he addressed a letter to the medical licensing authorities in which he asked if they would be prepared to express approval of two draft clauses for the amendment of the Medical Act, 1858, copies of which were enclosed. At the meeting of the Executive Committee on Feb. 27th, 1899, the President reported that he had received answers to his letter from all the medical authorities with six exceptions. Four of the authorities approved of the suggested clauses, several others approved of Clause 1 but took exception to Clause 2, whilst some found matters in both clauses with which they could not agree. To meet the objections which had been raised the Executive Committee resolved that the President's interim report of Feb. 27th should be remitted to Mr Muir Mackenzie and that he be requested to consider the objections taken and the suggestions which had been made by several of the medical authorities for the amendment of the clauses.

During the interval between the meetings of the Executive Committee on Feb. 27th and May 29th, the six medical authorities which had not replied to the President's letter of inquiry at the first mentioned date had forwarded their comments on the clauses submitted to them. The answers of these bodies left the question in much the same position as it was placed in by the earlier series of replies. The President embodied these in a second interim report presented to the Executive Committee on May 29th, and along with them amended clauses drafted by Mr Muir Mackenzie to meet the objections which had been taken by certain of the medical authorities. After consideration the following resolution was adopted by the Executive Committee That the Executive Committee approve of the amended clauses drafted by Mr Muir Mackenzie and request the President to forward them to the medical authorities before submitting them to the Council.

On the motion of Dr MACALISTER, seconded by Mr BRYANT, this interim report was entered on the minutes.

The PRESIDENT mentioned that he had asked the Registrar to circulate the two interim reports which were referred to in the interim report which the Council had just received, so that they would have the opportunity of reading what the views of the different medical authorities were on the proposed amending clauses submitted to them and they would also have the opportunity of reading the suggested clauses drawn by Mr Muir Mackenzie for the purpose of meeting the difficulties He should communicate with the various bodies when he had time to get the letter written

Proposed Amendment of the Medical Acts.

The Council proceeded to hear a communication from the Privy Council Office in regard to an Amending Bill drafted by the Incorporated Association of Medical Practitioners presented to the General Council by the Executive Committee, together with a report thereon obtained by them from the legal adviser of the Council These were as follows —

(a) COMMUNICATION FROM THE PRIVY COUNCIL OFFICE.

Privy Council Office, Feb 9th, 1899.

SIR,—Referring to previous correspondence on the subject of the proposed amendment of the law with a view to obtain penal and disciplinary powers in the case of persons whose names have in certain circumstances, been erased from the Medical Register, I am directed by the Lord President of the Council to transmit to you, for the information of the General Medical Council, the accompanying copy of a proposed Bill which has been drafted by the Incorporated Association of Medical Practitioners for preventing persons who have been removed from the Medical Register under Section XXIX of the Medical Act, 1858, from continuing to act as medical practitioners.

I am, Sir your obedient servant,

Sir William Turner, A W FITZROY,
President of the General Medical Council.

(b) ENCLOSURE.

AN ACT to prevent persons who have been removed from the Medical Register under the provisions of Section XXIX, of the Medical Act, 1858, from continuing to act as Medical Practitioners.

WHEREAS it is expedient that persons who have been removed from the Medical Register by the General Council of Medical Education and Registration under the powers conferred upon it by the Twenty ninth Section of the Medical Act, 1858, should be prevented from continuing to act or practise as Medical Practitioners: Be it therefore enacted by the Queen's Most Excellent Majesty by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same as follows —

1. This Act may for all purposes be cited as "The General Medical Council (Additional Powers) Act."

2. This Act shall commence and take effect from the first day of September, 1898.

3. Any person whose name shall have been removed from the Medical Register by the General Council of Medical Education and Registration under the powers conferred upon the said Council by the Twenty ninth Section of the Medical Act and who shall thereafter practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of the United Kingdom of Great Britain and Ireland, shall, upon a summary conviction for any such offence, pay to the said Council a sum (not exceeding twenty pounds)

4. The General Council of Medical Education and Registration shall be entitled to receive all fines inflicted upon offenders convicted under Section 40 of the Medical Act, 1858.

(c) REPORT BY MR. MUIR MACKENZIE.

Penal and Disciplinary Powers—Proposed Amendment Bill.

I have considered the Bill which has been drafted by the Incorporated Association of Medical Practitioners for the purpose of preventing persons whose names have been removed from the Medical Register from continuing to act as medical practitioners.

The provisions of the Bill are set out at pages 25 and 26 of the Minute of the Executive Committee of Feb. 22nd, 1899 (and above).

As regards the general principle of the Bill it is undoubtedly of a very stringent character If passed into law its effect would be to make it a criminal offence for a person whose name had been removed from the Medical Register for misconduct to practise medicine or surgery in any way The creation of such an offence would introduce an altogether new principle in the legislation which is embodied in the Medical Acts and would probably arouse very considerable opposition in Parliament. Expressing my own opinion, I could not advise the General Medical Council to support such a measure without very careful consideration.

As regards the details of the Bill, the points upon which I wish to observe are the following:—

The 3rd Clause provides that on a summary conviction the offender is to pay to the General Medical Council a sum not exceeding £20. The words of the Clause thus differ from those of Section 40 of the Medical Act, 1858, and seem to me open to objection on that ground. Next there is no reference to midwifery in the 3rd Clause of the Bill. This seems to me to be open to objection.

Lastly as regards the 4th Clause, it does not in my opinion adequately meet the difficulty which has arisen with regard to the payment to the General Medical Council of penalties inflicted under the Medical Acts. The difficulty which has arisen is that the metropolitan authorities contend that by virtue of the stringent terms of the Police Act, 1839, which provides that penalties imposed by any future Act of Parliament, when recovered in the metropolis, are to be paid to the Receiver of Police, that official is entitled to all the penalties recovered under the 40th Section of the Medical Act, 1858 in the metropolitan police courts. The clause in the proposed Bill is not framed, I think in terms which would displace the contention of the metropolitan authorities, if that contention is a sound one.

On the whole therefore, I do not feel that I can advise the General Medical Council that the proposed Bill is one which deserves the Council's support. (Signed) M. MUIR MACKENZIE.

4, Temple-gardens E.C, May 11th, 1899

Dr MACALISTER moved that the communication from the Privy Council, along with the enclosure and the report on the proposed Bill by Mr Muir Mackenzie, be entered on the minutes

Mr BRYANT seconded the motion

The motion was agreed to

Mr BRUDENELL CARTER We are not asked by the Government to give any opinion on this matter

The PRESIDENT No, it is only to supply us with information on the subject

Mr BRYANT asked whether it would not be well that the Council should have some information as to the nature of the society asking for the Council's action

The PRESIDENT The association referred to in this case addressed the Privy Council and the Privy Council sent us their communication The association does not come directly to us

Mr BROWN I think we should give some kind of reply to the Privy Council

The PRESIDENT We are not asked to

Mr BROWN said that he must express regret that the Executive Committee had not asked the Council to support such a measure as the one included in the communication, because he believed the proposed Bill contained clauses which the Council very much desired He should have been much better pleased if Mr Muir Mackenzie, instead of pointing out difficulties, had told the Council how to avoid the difficulties that were in the way He should like to have some guidance in this matter Although Mr Muir Mackenzie did not offer them any guidance he was rather astonished to find that in the interim report of the President clauses were submitted for the recovery of fines in medical cases in the metropolitan police courts

Dr CHURCH rose to a point of order He said there was no motion before the Council and Mr Brown was introducing a subject which was not before them

The PRESIDENT agreed that there was no motion before the Council

Mr BROWN suggested that the matter should go to the Executive Committee.

The PRESIDENT No

The subject then dropped.

The Apothecaries' Hall of Ireland

Sir DYCE DUCKWORTH, chairman of the Examination Committee, presented reports on the inspection of examinations of the Apothecaries' Hall, Dublin, held in October, 1898, and in January and April of the present year After reading portions thereof he moved that the reports be received and entered on the minutes

Mr BRYANT seconded the motion

Mr TICHBORNE said that he objected to the reports going on the minutes and he moved the adjournment of the debate

This motion was agreed to

The Council adjourned till Monday

MONDAY, JUNE 5TH

The Council met again to-day, Sir WILLIAM TURNER presiding

The Examinations of the Apothecaries' Hall of Ireland

The first business was the consideration of the motion brought forward by Sir DYCE DUCKWORTH on Saturday —

That the reports of the Examination Committee on the inspection of the examinations of the Apothecaries Hall, Dublin be received and entered in the minutes.

Mr TICHBORNE, the representative of the Hall, said he desired to object to this motion because he took exception both to the tone of the reports and to some of the matter they contained The tone of the Examination Committee was antagonistic to this body and it appeared to him that all through these reports they were trying to make out a case against it He submitted that the observations made by the committee were in several instances not borne out by the reports of the visitors, inspectors, and examiners, and he concluded by moving as a rider to the motion —

That certain expressions and passages be omitted from the reports of the Examination Committee.

Dr BRUCE seconded this proposal

Sir DYCE DUCKWORTH denied that the committee had done more than discharge the somewhat difficult duty imposed upon them in connexion with the examinations of this body which in a sense was under the tutelage of the General Medical Council and he insisted that justification for everything said by the committee in their reports would be found in the reports of the visitors, inspectors, and examiners Exception had been taken to the use of the word 'solitary" before the word "candidate," but he considered it necessary to accentuate the fact that all this heavy machinery of examination was brought into play to examine a single candidate It was no small matter this for the Council because in connexion with the examinations of this body during the last 15 months they had spent no less than £307 10*s* 8*d* As long as he was chairman of the committee he would take care that they did their duty without fear or favour and reported to the Council what they considered it their duty to report in the circumstances of the case

Mr HORSLEY said he desired to support the Examination Committee He was sure the profession did not know that because the Apothecaries' Hall of Dublin wished to hold these examinations they were being taxed to this extent.

Dr BRUCE said that whatever the cost might be this Council was bound to carry out the law

The motion of Mr Tichborne was put to the Council in three sections and each section was rejected by a large majority

Sir CHRISTOPHER NIXON said he would like to know whether the Council were going to continue this large expenditure in view of the small return obtained from it. He quite agreed that the law must be carried out, but as practical men they must look for some result for the money they expended

The PRESIDENT said that this was a matter which really was not before the Council

Sir CHRISTOPHER NIXON intimated that he would give notice of a motion on the subject.

The reports were then formally received and ordered to be entered in the minutes

The Standard of the Preliminary Examinations

Sir JOHN BATTY TUKE presented the following interim report by the Education Committee on the proposal to raise the minimum requirements of the Council as regards preliminary examinations to the level of the senior and higher grade examinations

On Nov 29th, 1898, the following motion was agreed to by the Council:—

'That the Education Committee be requested to consider and report to the Council during the next session as to the earliest date at which, in their opinion it will be practicable to raise the minimum requirements of the Council as regards preliminary examinations to the standard of the senior and higher grade examinations at present recognised.'

The committee, being fully aware of the complexity of the subject of the reference, deemed it advisable to obtain the opinions held regarding it by various educational authorities and to lay them before the Council.

The following letter was accordingly sent to the bodies and persons connected with general and medical education whose names are contained in the Appendix Section I —

Edinburgh 20 Charlotte-square Dec. 27th, 1898.

SIR,—The General Council of Medical Education and Registration is

desirous of raising considerably the standard of general education in Arts which it requires of students intending to prepare themselves for the medical profession. After the 1st day of January 1900 it proposes for the purpose of the registration of such students at their entrance upon the professional course to accept no certificate of examination in the educational subjects prescribed by the Council's regulations which is given for a lower standard of attainments than that required for the junior local examinations of the English and Scottish Universities and the equivalent junior examinations held in Ireland. The Council and its Education Committee are, however anxious to introduce, so soon as it is deemed practicable, a still higher standard of requirement represented by the senior local examinations of the several universities, the higher grade examinations of the Scottish Education Department, and the senior grade examination of the Intermediate Education Board of Ireland.

The Education Committee has accordingly been requested by the Council to institute inquiries in order to ascertain the earliest date at which such advance may be made having in view the desirability on the one hand of materially improving the educational status of medical students, and on the other of avoiding such a diminution of the supply of candidates for the profession as would be detrimental to the public interest.

In the belief that the knowledge and experience at your command will enable you to give the committee assistance in determining the questions now under consideration I beg leave on its behalf to ask you to favour me with an early reply to the following inquiries and to say that your reply, together with any communications on the general subject which you may see fit to make, will have the careful attention of the committee and of the General Council —

1. Is it practicable within the next few years to require that all intending students of medicine shall have passed an examination equivalent in character and standard to the senior local and higher grade examinations?
2. If it is practicable, what is the earliest date at which the higher standard should be enforced?
3. What proportion of students would probably be precluded from entering upon a course of medical study (say at the age of 18 years) if the junior examinations at present recognised should (say in 1900) cease to be accepted by the Council for the purpose of registration?

Herewith are sent an extract from the report of the Education Committee adopted by the Council on Nov 25th 1898 a copy of the Council's regulations respecting the registration of medical students and a copy of a table showing the results of preliminary examinations in 1897 compiled by the Registrar of the Council from such returns as have, in response to the Council's request, been supplied by the examining bodies. I am, Sir your obedient servant,

JOHN BATTY TUKE,
Chairman of Education Committee of the General Medical Council.

*To*_____

The committee submit the replies already received. They find it impossible to comply with the request contained in the reference to report in May 1899 as they expect to receive further communications and as they could not possibly collate the evidence before them and bring it to bear on the general question during the time at their disposal. Moreover the committee believe that it is of the greatest importance to give the Council opportunity to study the various communications now submitted. Such study will enable the Council to appreciate the manifold difficulties which surround the whole subject. Without committing themselves to any expression of opinion the committee beg to indicate to the Council that, considering the various and important interests to be considered, the preparation of the report demands considerable time and attention and they accordingly trust that the Council will consent to extend the period of their reference.

The committee have come to the conclusion that in order to deal effectively with the questions raised by the communications contained in this interim report they must ask the Council to provide them with the means of obtaining expert assistance. They therefore recommend that for the current year a sum of £100 be placed at their disposal for this purpose.

The Council agreed to receive the report and have it entered in the minutes

Sir JOHN BATTY TUKE in moving its adoption said that the Education Committee during the last six months had been endeavouring to carry out the reference made to them in November of last year It was suggested that it would be of great assistance to get the opinion of various bodies and persons closely connected with general and medical education, and accordingly a circular letter was issued To this letter they had received 44 answers A certain number of bodies had not answered and he could not help expressing some surprise at the omission of certain of these bodies But he might say that the 44 bodies and persons who had replied were representative of every interest concerned and the Council were under considerable obligation to them for the care and attention which they had given to the subject. The inquiries of the committee showed that the whole question was much more complex and difficult than appeared to certain of the members of the Council six months ago A study of the answers received brought out the fact that there was a very wide divergence of opinion on the proposal made On the one hand they had opinions that it was practicable to raise the standard to the level of the senior and higher grade examinations in 1905 or even earlier while on the other they had opinions that it was absolutely impracticable at any rate for many years to come Between these two extremes they had various shades of opinion As to those who held it to be practicable at an early date, without going into a detailed analysis of the replies it was interesting to mark that those who were most confident upon the subject were the headmasters of schools and the heads of purely medical bodies—that was to say, bodies which did not deal with general and medical education conjointly It was equally interesting to note that bodies which dealt conjointly with general and medical education sounded notes of warning There were certain exceptions, but as a rule the universities sounded notes of warning In the case of most of the universities doubt was thrown upon the practicability of immediate action, at any rate, they advised caution in action He wished specially to draw attention to the replies received from the universities of Scotland inas much as these bodies had within a few years had the experience of a sudden raising of the standard of preliminary education and they had given the results of that experience An important point was the raising of the age and the consequent reduction in the number of medical students It was held by some of the bodies that the general tone and high standard of medical education existing in Great Britain and Ireland at this moment might drop if the number of students were reduced Another point brought out by the replies was that the relative value of certain of the preliminary examinations accepted by the Council was not well defined and he might say that during the past six months the committee had been endeavouring to satisfy themselves upon this point They had made application to various examining bodies to allow them access to the answers of candidates They had applied to the Oxford and Cambridge Schools Examination Board, the Education Department for Scotland, the Scottish Educational Institute, and the Conjoint Board of the Irish Colleges All these bodies had given them access to papers The papers they asked for were 20 or 25 specimen papers of the lowest mark candidates—the men who in students' language just managed to scrape through Members of the committee had examined these papers and formed their own individual opinion about their relative merits No one could doubt that this was the only way to arrive at any estimate of the relative value of the examinations But the committee felt that the inspection of papers should be undertaken by authorities in general education However willing the Council might be to accept the opinion of members of the Education Committee, those members felt that too much responsibility would be thrown upon them if they were asked to undertake this duty The committee felt that they could not come to a conclusion upon the general question without some expert assistance as to the relative value of the junior examinations and there were other matters in connexion with which expert assistance would be of the very greatest use. The plan of action would, it appeared to him, though it had not been actually recommended by the committee, be that they should appoint three men one for each division of the kingdom who as far as possible were unconnected with any interest involved and that to them should be submitted the regulations of the examinations of the various bodies in order that they should see whether they came within the requirements of this Council, and that they should apply again for the inspection of papers from the various bodies and forward these papers to the experts It might be advisable that the experts should hold conference with the Education Committee, but whether they did or did not they would frame a report upon which the Education Committee could found a report to this Council In this way he hoped the committee would be able in November to suggest a scheme by which a system of gradual raising of the junior examinations could be established such as would not leave much to be desired in 1905 But the committee felt that until they were supported by the opinion of such experts as he had referred to—until they were able to come to something like a definite opinion as to the relative value of many of the examinations—it would be extremely difficult for them to issue a satisfactory report to the Council But backed up by such an opinion he believed they would be able to submit a scheme in November which would meet with very general acceptance

Dr MACALISTER formally seconded the motion.

The PRESIDENT said that he would venture to point out that this was only an interim report and to suggest that they should not now go into the question of analysis of the various communications received by the Education Committee but limit themselves to the two recommendations one, that the period of reference should be extended, and

the other that the committee should be provided for one year with a sum of £100 to get the expert assistance suggested.

Mr BRYANT said that as chairman of the Finance Committee he could see no objection to this very modest request on the part of the Education Committee

The two recommendations in the form suggested by the President were put to the Council and at once adopted.

The Midwives Bill

Sir RICHARD THORNE, as chairman of the committee, read the following report by the Midwives Bill Conference Committee on the Midwives Bill, 1899 —

In accordance with the resolution of the Council of Nov 29th, 1898, "That the Midwives Bill Conference Committee be re-appointed [with the addition of Mr Horsley] for the purpose of watching any legislation that may be proposed on the subject in the next session of Parliament, your committee have considered 'A Bill to Promote the Better Training of Women as Midwives and to Regulate their Practice, 1899,' which has been read a first time in Parliament, and they now beg leave to report as follows. A copy of the text of the Bill is hereto appended.

1. With reference to Clause 2 of the Bill they would recall the fact that in a report of the Council April 6th, 1898, which was directed to be forwarded to the Lord President of the Council, the Council laid it down "that the term 'midwife' should be defined as meaning a woman who undertakes for gain to attend cases of natural labour and who is not registered under the Medical Acts. Clause 2 of the Bill of 1899 defines a midwife simply as a woman who undertakes for gain to attend women in childbirth

Your committee hold it to be of fundamental importance that the words 'natural labour" should be retained in the definition and they strongly urge this point for the following amongst other reasons —

If the word 'childbirth' is used without limitation it may well be held to confer on women not registered under the Medical Acts a statutory right to attend for gain cases of abnormality or disease in connexion with parturition This is not only contrary to the public interest, but is inconsistent with Section 32 of the Medical Act, 1858, and of Section 6 of the Act of 1886.

Your committee hold strongly that a point which is of such vital importance should be expressly embodied in the statute and should not be left to be dealt with under rules which may be varied from time to time.

As regards the meaning of "natural labour" your committee are of opinion that the rules to be drawn up by the Central Midwives Board under Clause 5 (3) I (*d*) of the Bill can be fully relied on to deal with any difficulties such as, it is alleged might arise on this point. It would be easy for example, to specify the conditions indicating difficulty abnormality, danger, or disease under which qualified medical assistance should forthwith be sought.

2. As regards the matter dealt with in Clause 3 (2) of the Bill your committee are of opinion that the Bill should contain a provision making it penal for a licensed midwife to employ as her substitute in attending for gain on a case of labour any person not licensed under the Act

Sub-clause (4) of this clause should in their opinion, be extended so as to prohibit the granting by a licensed midwife of any certificate relating to a death or stillbirth.

3. On Clause 4 your committee are of opinion that the requirement as to evidence of good character should apply to all applicants for "licence and also that the clause should be amended so as to make all certificates purporting to be evidence of training and skill in midwifery subject to the approval of the Central Midwives Board.

4. With regard to Clause 5 (1) your committee resolved to disapprove of the proposed constitution of the Central Midwives Board, on the grounds that it should be more representative in character and should include registered medical practitioners who are familiar with the condition of midwifery practice in local districts throughout England and Wales.

As to sub-clause (2) of this clause they would further state that it is their opinion that all the members of the Central Midwives Board should be registered medical practitioners

With regard to sub-clause (3) they would observe on (*a*) that they are of opinion that it should be made clear that the rules passed by the Central Midwives Board are *not to be valid*, unless and until they have been approved by the General Medical Council and on (*b*) that, in their opinion the paragraph should run as follows: "regulating the course of training and the conduct of examinations" to be required for a "licence.

5. In Clause 7 of the Bill your committee are of opinion that the term "qualifications" should be avoided as being likely to lead to misapprehension and that it should be replaced by the term "conditions," which is used in Clause 5 (3) I (*a*)

6. In Clause 9 the committee would express the opinion that the local sanitary authority, which is primarily concerned with questions affecting the prevention of disease, including puerperal fever, should take part in the local administration of any Act relating to midwives. Modification of the Bill in this sense would involve corresponding modification of the financial and other clauses of the Bill.

7 At this point they would also call attention to the imperative necessity of making provision for qualified medical assistance in every case attended by a midwife which presents symptoms of difficulty abnormality, danger or disease on the part of the mother or of the new born child. As regards this matter they would call attention to report of the Council of April 6th, 1898, paragraph (10), and to the concluding paragraph of the report by the committee appointed by the Council to confer with delegates from the Midwives Bill Committee, Nov 22nd, 1898.

8 With regard to the concluding paragraph of the Bill your committee are of opinion that a small fee should be charged on each occasion of the annual renewal of the 'certificate.'

9. They are further of opinion that the misdemeanour referred to in Clause 11 (*a*) of the Bill should relate to both the "licence and the "certificate.'

10. On Clause 12 the committee would observe that in their opinion the misdemeanour as to falsification should include any person" and should not be limited to the person appointed to keep the roll,

11 On the Bill generally your committee would further observe:—

(*a*) That the term 'licence" should throughout be restricted to the permission granted by the local supervising authority to practise in a given area, and that the document granted by the Central Midwives Board should be termed a certificate entitling the possessor to be placed on the Midwives Roll and thereby testifying to her competence to receive a local licence." This change will involve certain consequential modifications in many of the clauses of the Bill.

(*b*) That they assume that before any Bill regulating the training and practice of midwives is passed into law provision will be made by Parliament for covering both the general and special expenses which the Council and any committee appointed by them will have to incur in the performance of any duties that may be imposed on them under that law,

The committee accordingly recommend: That the Council inform the Lord President of the Privy Council that they are unable to approve the Bill unless it is recast in accordance with the suggestions made in this report.

The report, on the motion of Sir RICHARD THORNE, seconded by Dr MACALISTER, was received and entered on the minutes

In answer to the PRESIDENT,

Sir RICHARD THORNE said that he did not intend to move the adoption of the committee's recommendation He could not do so for this reason, that there was a very important clause in the report in regard to which when it was put before the committee he was in the minority

Mr HORSLEY said that if it was to put the Council in order he should be very happy to move the adoption of the report because he felt most strongly that it should go to the Privy Council

Sir CHRISTOPHER NIXON, another member of the committee, agreed to second the motion for the adoption of the report

Sir RICHARD THORNE did not think any advantage would accrue from the representation of medical practitioners for local districts and he was distinctly of opinion that any central midwives board that might be formed should have in it something of the lay element

Dr MACALISTER, as another member of the committee who was in the minority in which the chairman had found himself, contended that if the Council adopted Section 4 of the report which was now before them they would be going beyond the Council's previous policy on this question, and if they spoke to the Privy Council in the sense of the report they would minimise their influence with the Council

Mr BRUDENELL CARTER was inclined to think that if the Bill passed one of its early effects in many localities would be to prevent women now practising continuing to do so and it would be quite sure to excite in many localities certain feelings of sympathy—certain feelings that the women were being subjected to hardship Under such circumstances he could not help feeling that there should be a non medical element on the Midwives Board The Government might follow the example in the Medical Act in constituting any such central board for midwives as that proposed At the same time he thought that it would be unwise for the Council to adopt the report of the majority of the committee

Dr LOMBE ATTHILL said that he had considered this report with very great care and as one who had had midwives under his care for the greater part of his professional life he wished to say that he thought the report was very satisfactory He was thoroughly in accord with Mr Carter and other speakers that there should be a non medical element on any central board which might be formed He also thought that this proposed board was very much superior to that in the other Bill, which proposed that there should be a number of ladies and the representatives of certain bodies which had no charters of incorporation The smallness of the proposed board was a recommendation He thought it would be a very great mistake for the General Medical Council to disapprove of Clause 5 of the Bill, for he feared that if the board was to be entirely a medical board it would be looked upon as a partisan board

An endeavour was made to arrive at an understanding. It was moved by Mr HORSLEY and seconded by Sir CHRISTOPHER NIXON —

That the report of the Midwives Bill Conference Committee on the Midwives Bill, 1899, be adopted and that the Council do inform the Lord President of the Privy Council that they are unable to approve the Bill unless it is recast in accordance with the suggestion made in this report.

As an amendment it was proposed by Sir RICHARD THORNE and seconded by Dr MACALISTER —

That the Council withhold its approval from the first two paragraphs of Clause 4 of the report and that the communication to the Lord President of the Privy Council be modified accordingly

Mr HORSLEY wished to speak with reference to this amendment He did not object to the introduction of the lay element but he thought that if the body was to be a small one there would be danger in introducing the lay element As the clause objected to had been carried by a majority in the committee he ventured to hope that it would be carried by a majority in the Council

On a division the amendment was carried by 17 votes to 10, and when put as a substantive motion by 16 votes to nine

Dr MACALISTER moved that the report as amended by the deletion of the first two paragraphs of Section 4 of the report should be sent to the Privy Council

This proposal was unanimously agreed to

The following further report from the Midwives Bill Conference Committee was read by Mr ALLEN, the Registrar —

(a) The Midwives Bill Committee have had under consideration a memorandum, &c. by the British Medical Association on the Midwives Bill referred to them by the President of the Council and they beg leave to suggest that the British Medical Association be thanked for their communication and enclosures and that they be informed that the committee of the Council, in drafting the report on the Midwives Bill which they have submitted to the present session of the Council have had regard to the principal matters embodied in the memorandum and Draft Bill of the Association, and that the Association will find that many of their suggestions find support in the report of the committee.

(b) The Midwives Bill Committee have had under consideration a memorial from the British Gynæcological Society with reference to the Midwifery Bill referred to them by the President of the Council and they beg leave to suggest that the following reply be sent:—

That the memorial be acknowledged with thanks and that the British Gynæcological Society be informed that the successive reports of the committee to the Council will show that the considerations set forth in the memorial have continually been kept in view by the committee

(c) The committee have also considered a report of March 6th, 1899 forwarded by the Royal College of Surgeons of England and submitted to them by the President of the General Medical Council

The committee report that the matters referred to in the report of the College have received their consideration and that they believe the report which they have presented to the Council during the present session contains evidence that they have felt it their duty to direct the attention of the Council to the majority of the points adverted to in the report of the College.

Sir RICHARD THORNE said that the foregoing was the answer that it was proposed to send to the memorialists He moved that the report be received, entered on the minutes, and adopted

Dr MACALISTER seconded and the motion was agreed to

Diploma in Public Health

Sir RICHARD THORNE, on behalf of the Public Health Committee, submitted a report on the regulations for the Diploma in Public Health of the University of St Andrews, and on his motion, seconded by Dr MOVAIL, the report, which was as follows, was received, adopted, and entered on the minutes —

The Public Health Committee having had referred to them by the President the regulations for the Diploma in Public Health forwarded to the Council by the University of St. Andrews beg leave to report as follows —

1. They would point out that whereas the rules adopted by the Council on June 9th 1896, require that a period of not less than 12 months shall elapse between the attainment of a registrable qualification in medicine, surgery, and midwifery, and the admission of the candidate to any part of any examination for the diploma, it is by no means clear that this condition is required under the regulations for the University of St. Andrews

Rule I requires that this interval of 12 months shall elapse before entering upon the Examination for this Diploma." There are, however two examinations, and whereas under Rule II a candidate need only have attended one of the two six months' courses required under the rules of the Council before entering on this first examination it is clear from Rule III that the second of the two six months' courses need not be followed until the candidate proceeds to the second examination for the diploma.

The wording of these two rules in relation to the requirement of the Council is to say the least, ambiguous and in view of the fact that the candidate is definitely informed that he can enter upon one part of the examination before he has even commenced the second of the two courses of six months study required by the Council, your committee are of opinion that it should be made clear in Regulation No. I. that no candidate can present himself for any part of the examination until not less than twelve months have elapsed since the attainment of a registrable qualification under the Medical Acts.

2. Whilst admitting that the Regulation No. IV which deals with the subjects of the examination is satisfactory when read together with the Appendix to the Regulations, the committee are of opinion that since definite mention is made in the Regulation No IV of such subjects as chemistry physics and meteorology it is to be regretted that this regulation contains no reference whatever as regards either the written, oral, or practical part of the first examination, to the subject of bacteriology, to which prominence is given in the rules of the Council

3. It is stated in Regulation No IV that the second examination shall as far as possible" embrace practical as well as written and oral tests. The committee are of opinion that no such examination can be regarded as satisfactory which does not necessarily include a practical examination into the candidate's knowledge of the outdoor work of a medical officer of health. In this connexion the committee would recall Conclusion No 7 of the first report of the Public Health Committee, Nov 29th, 1895, which is as follows —

We are of opinion that practical examination in the outdoor work of a medical officer of health, including a test of ability properly to interpret plans, should form part of every examination for a diploma or certificate in public health.

4 Having regard to the general efficiency of the scheme as formulated by the University of St. Andrews the committee are of opinion that there would be advantage in asking the University to reconsider their regulations in the sense of this report.

In moving that this report be adopted Sir RICHARD THORNE announced that the University of St Andrews had authorised their representative on the Council to make such verbal alterations in the regulations as, in the opinion of the committee, fully met the points raised in their report In the amended form in which they were now submitted the committee had no objection to raise to them

On the further motion of Sir RICHARD THORNE, seconded by Mr TEALE, it was agreed that the reference to the committee on the subject of outside work should be continued

Medical Aid Associations

Dr GLOVER presented the report of the Medical Aid Associations Committee and moved that it be received by the Council and entered on the minutes

Mr TEALE seconded and the motion was agreed to

The report is as follows —

The committee would, by way of preface, remind the Council that in 1893 a report on medical aid associations was presented by a committee of the Council and was discussed on May 26th, when the following resolutions were arrived at — (1) That the following rules, already laid down by the Council as to covering unqualified assistants do apply to medical officers of medical aid associations in respect of any unqualified persons whom an association may have engaged to assist them Rule (a) 'That the Council record on its minutes, for the information of those whom it may concern that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract are if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act. Rule (b) A registered medical practitioner would render himself liable to the censure of the Medical Council in case of the employment of an unqualified assistant in the practice of medicine, surgery or midwifery on behalf and for the benefit of such registered practitioner either in complete substitution for his own services or under circumstances in which due personal supervision and control are not, or cannot be, exercised by the said registered practitioner (2) That the investigation by the committee of the question of the conduct of medical aid associations has not disclosed the prevalence of any offences with which it falls within the statutory province of the Council to deal but that the report of the committee with reference to certain evils which it describes cannot fail to be instructive to the Executive Committees and medical officers concerned and that the President be requested to transmit copies of the report to these committees and officers."

The committee are now able to report to the General Medical Council the result of their labours in discharge of the duty imposed on them by the following resolution of the Council passed May 31st, 1897: That the communications in regard to medical aid associations received by the Executive Committee on May 24th 1897 be referred to a committee consisting of the following members: Mr Teale, Dr Glover Dr Bruce, Dr Rentoul, Mr Bryant, and Dr Church

One of these communications was in the form of a memorial presented to the General Medical Council by a deputation appointed at a meeting of the medical men of Norwich. It expressed the desire of the memorialists to have the opinion of the Medical Council on the question of professional intercourse with the medical officers of the Norwich Medical Institute. At the meeting of the profession in Norwich a committee was appointed to consider the relation of the Medical Institute to medical aid associations and the committee reported that the institute is a trading society conducted by laymen, for affording medical attendance in return for a small annual subscription (3s.) only a portion of which is paid to the medical officers, the remainder going to defray the working expenses, and the balance is appropriated for investment in the acquirement of real property The committee considered that the four conclusions summarised in the report of the General Medical Council on the evils of medical aid associations are in every case applicable to the Norwich Medical Institute and were unanimously of opinion that it is unbecoming and unprofessional for any member of the profession to lend his name or to associate in any way with such a society

The report of their committee was unanimously adopted by the medical men in Norwich and the memorialists sought the advice and guidance of the Council on the question of meeting in consultation medical men who had undertaken duties on conditions which must be considered detrimental to the public and derogatory to the profession.

The second communication was received from the Norwich Medico-Chirurgical Society composed of medical men residing in Norfolk and Suffolk, desiring the General Medical Council to take steps to counteract the growing evils of medical aid associations and of medical institutes, and pointing out that the formation of such institutions in Norwich and at Great Yarmouth had attracted the attention of the profession in East Anglia.

The members of the Norwich Medico-Chirurgical Society resolved (*nem. con.*) to decline professional intercourse and consultation with the medical officers of these institutions and in their communication to the Council directed attention to the step they had taken

The REGISTRAR More than a month ago

Mr HORSLEY But it is quite obvious that members have not had time to read it

Dr GLOVER The conference was held last year

The PRESIDENT But the report was circulated only a month ago

Mr HORSLEY At any rate, I state that as a fact. Proceeding, Mr Horsley said that the next point was that the proposition by the committee took the Council almost beyond their province The work which the Council had to do was laid down by the Medical Acts and the Council had no permission to dictate to the profession what was to be the duty of it They might suggest and if this was to be a suggestion only then there was not so much to object to in it Still, the Council were the head of the medical profession and because of that it behoved them not to agree to any motion which would imperil the dignity or curtail the proper functions of the Council. Now, if they were to make a suggestion of the kind in question to the profession the profession would naturally ask if they had examined into the circumstances in which they proposed to enter into conference Would the wage limit be discussed? On behalf of the friendly societies it had been stated that it would be impossible for them to discuss the wage limit Why, then, should the profession go into this with their hands tied? The matter altogether was a very difficult one and would require much further consideration from several points of view In the meantime his opinion was that this board of conciliation could have no useful outlet for its work and he wished the Council if they went to a vote to negative the proposal

Mr BROWN said that while he agreed generally with all that had fallen from Mr Horsley, he at the same time thought that if a board of conciliation were formed upon which the members of the medical profession were largely represented and could confer with the managers of the friendly societies it might be possible to bring about a *modus vivendi* that would prevent the necessity of the intervention of the General Medical Council The recommendation in operation might prove to be a throwing of oil on the troubled waters He thought the proposed board deserved a trial and if it were found that it did not answer it could be dropped at any time

Mr BRUDENELL CARTER was of the opinion that the adoption of the recommendation might do a great deal of good. The proposed board could not do any harm That Council had no power to prevent any man from selling his skill or services on any terms that might seem good to him, but he thought the Council might say to the profession that the best thing they could do would be to go into conference with the friendly societies and thresh out with them in a friendly way their respective difficulties

Mr BRYANT'S view was that nothing but good could result from the deliberations of a conciliation board The societies represented at the conference numbered 33, and these had an aggregate membership of 3 500,000 and a capital of £23 000,000 sterling Since that conference he had had the opportunity of meeting the Chief Registrar of Friendly Societies who regarded a conference between the representatives of friendly societies and of the medical profession very hopefully and with evident satisfaction, and he trusted that the General Medical Council would do their best in support of the proposal

Dr LEECH supported the recommendation because he was of opinion that a board of conciliation such as was proposed would do good to the medical profession, but a great deal more good to the friendly societies It would be a great disappointment if the Council did not accept this recommendation.

Mr TEALE wished to tell the Council that he was greatly struck by the tone of the gentlemen from the friendly societies who met the committee of the Council by their statesmanlike policy and their generous appreciation of the work of the medical profession, and also by their real desire to do what was fair as between their own associations and the medical profession so as to bring all matters in dispute to a friendly termination

Sir RICHARD THORNE thought that he ought to oppose the formation of this conciliation board until he knew how it was going to be constituted Seeing that the Council had to deal with offenders under the Medical Acts he was of opinion that having regard to their statutory responsibilities no member of the Council should take any part in the constitution of the proposed board.

Dr MCVAIL could not see in what way the opinion of the profession on this subject could be ascertained How were they to obtain the five or six medical representatives There was no question that if the General Medical Council proposed them the medical profession would repudiate them

Dr BRUCE pointed out that if the General Medical Council could not go the length of appointing the medical representatives to a conciliation board, if they agreed to the principle of such a board they would be taking a large step forward He agreed with Dr Glover that there was a great disposition to come to terms

Sir DYCE DUCKWORTH said that whatever vote the Council should give he would regard it as only an academic vote He hoped that the Council would take no active part whatever in the matter

After some remarks by Sir CHRISTOPHER NIXON,

The PRESIDENT said that the last speaker wished to dissociate himself from the present proceedings as something outside the powers of the Council as laid down by Acts of Parliament, but he wished to remind members that it was not the Council that raised this question, for the question was raised by certain members of the profession who sent to the Council memorials and practically asked them to adjudge those members of the profession who acted in connexion with these associations to be guilty of infamous conduct in a professional respect It was only right that the Council should endeavour to arrive at such a conclusion as would bring the friendly societies and the medical profession into harmonius action The committee had done their best to accomplish that and he must say that he would have listened to the opposition to the recommendation of the committee if they had put forward any alternative proposal He, however had not heard a single argument against the committee's recommendation which had been convincing to him. All that the Council was now asked to do was to agree to the principle of the formation of a board of conciliation If they so agreed, that would go out to the profession The Council was not at this time asked to determine who were to be the medical representatives on the board That was something which was not proposed at present They might lead in the matter, but they must remember that they could not drive the friendly societies who were certainly very powerful institutions—powerful numerically, and in connexion with the electorate, and in the influence which they could exercise at elections And if the Council could by the adoption of the principle of the proposed conciliation board bring the friendly societies into harmonious coöperation with the medical profession he felt sure that the Council should have done a great act at this meeting

Mr HORSLEY pointed out that he had offered a practical solution of the difficulty of the moment He had asked Dr Glover to postpone this matter in order that the members of the General Medical Council who were not perfectly familiar with the matter should have an opportunity to consider it

The PRESIDENT I do not consider that a practical proposal

Sir RICHARD THORNE, seconded by Mr TOMES, moved a rider to the effect—

That having regard to the statutory responsibilities which devolve on the General Medical Council it was very inexpedient that any member of the Council should take part either in the constitution or decisions of the proposed conciliation board

Some conversation ensued as to how this and Dr Glover's proposal ought to be put to the vote. The PRESIDENT thought for a time that the two might be combined in a single motion, but objection being taken, Dr MACALISTER suggested that the principle of Sir Richard Thorne's rider should be added to Dr Glover's motion as a proviso in the following terms —

Provided it is understood that having regard to the statutory responsibilities of the Council it is inexpedient that it should take part officially in the formation of the board.

Dr GLOVER and Dr BRUCE agreed to accept this proviso

The Council then voted for the amended proposal when 19 members voted for it and none against it A demand was made for the names with the result that on the roll being called it was found that 20 were in favour of the proposal, while eight did not vote and two were absent

The amended motion as agreed to is as follows —

That the Council approve of the recommendation of the committee in favour of the formation of a board of conciliation, to consist of representatives of the friendly societies and of the medical profession provided it is understood that having regard to the statutory responsibilities of the Council it is inexpedient that it should take part officially in the formation of the board.

The names of those who voted for the motion and those who did not vote were as follows —

For (20) Dr MacAlister, Mr Bryant, Sir Dyce Duckworth, Dr Pettigrew, Dr Church, Mr Tomes, Dr Heron Watson, Sir William Gairdner, Mr Brown, Mr Tichborne, Dr Glover, Mr Teale, Dr Bennett, Dr Philipson, Dr Reid, Dr Cameron, Dr Leech, Dr Bruce, Mr Carter, and Sir John Tuke

Did not vote (eight) The President, Dr Atthill, Sir Richard Thorne, Dr McVail, Sir C Nixon, Sir William Thomson, Sir Philip Smyly, and Mr Horsley

Absent (two) Dr Pye Smith and Dr Little

The discussion of the remainder of the report was postponed till Tuesday s meeting

The Council adjourned

TUESDAY, JUNE 6TH

The Council resumed work to-day, Sir WILLIAM TURNER presiding

Medical Aid Associations

The Council proceeded with the discussion of the report of the Medical Aid Associations Committee

The PRESIDENT said that he had called the attention of Dr Glover (the chairman of the committee) to the fact that his motion was in the position of what Sir Dyce Duckworth had called a pious opinion and that he had not suggested any means of taking action upon that opinion He believed that Dr Glover had now a further motion to propose

Dr GLOVER said that he proposed to move that a copy of the resolution passed yesterday be forwarded by the chair man of the committee to the various bodies and persons who had memorialised the Council on this subject

Dr MACALISTER suggested that it should also be sent to the friendly societies and in the first place to the executive body of the great conference of the friendly societies

Dr GLOVER expressed his assent to this suggestion

Sir RICHARD THORNE asked whether there was any precedent for a chairman of a committee doing an act of this sort on behalf of the Council

The PRESIDENT replied that no precedent occurred to him

As the result of some further discussion it was agreed to hold this particular matter over till to morrow in order that a resolution might be put into form

Dr GLOVER then moved the adoption of the second recommendation of the committee —

That the Council strongly disapprove of medical practitioners associating themselves with medical aid associations in which touting and advertising for the purpose of procuring patients are practised.

He explained that in the first part of the report the com mittee dealt with the friendly societies, while in the second part they dealt with a different class of medical aid associations—namely, those which for the most part were promoted by commercial companies, generally of the insur ance order, and who tagged on to the insurance business a medical aid department The method by which these companies worked was essentially one of touting and advertising in a very marked degree As a rule the friendly societies did not canvass, but these companies did business by going from door to door Dr Glover then read to the Council a number of documents which he had received from various quarters which illustrated the methods of touting and advertising pursued by the companies and concluded by recommending the motion to the Council as containing a moderate and practical proposal

Dr BRUCE formally seconded the motion

Mr BROWN who had on the programme a notice of motion to this effect—

That this Council regards it as unprofessional to hold the appointment of medical officer to any society established for the purpose of providing medical aid to its members whose agents systematically canvass for members from door to door—

said that in his opinion the motion proposed by Dr Glover was not strong enough He thought the action of the Council would have more effect if they declared that this conduct was "unprofessional" He spoke with some knowledge of these associations, for in the first year of his practice he was induced by an agent of one of them to allow his name to appear on the list of its medical officers The district was a working and middle class district in the north of London and the agent pointed out the advantage it was to the poor to get good medical advice at a merely nominal figure He was a young and somewhat enthusiastic surgeon then and he accepted the appointment But what did he find? Why, in a few weeks this man [illegible] g about the district and among his own patients asking them to join "Dr Brown's club at a penny per week" He at once took steps to dissociate himself from the society and never again had he had anything to do with such an organisa tion In this matter they ought to protect the profession and they ought to protect the public The medical officers were called upon to attend patients in such numbers and at such fees that it was perfectly impossible for them to do justice to the patients and the public undoubtedly suffered in consequence There were, of course, clubs and clubs The general practitioner had nothing whatever to say against the ordinary friendly society composed exclusively of working men who paid such a fee as medical men throughout the country generally thought fairly adequate for their services Indeed, medical men in the best class of practice in country towns and rural districts found a club practice such as he had indicated was really the backbone of a general practice, for it was an introduction to a private practice These practices were considered very much more valuable and more transferable when they had a good sprinkling of club patients But the thing they had now to deal with was something quite different Here they had people pestered to join these societies by a succession of agents, male and female, and he said that it was the duty of the Council to interfere for the protection both of the profession and the public

Mr HORSLEY expressed a preference for the motion stand ing in the name of Mr Brown

Dr PYE-SMITH expressed the same preference As for the word "touting" it was scarcely English and although it was supposed to be expressive no one knew exactly what it did express and he suggested that "soliciting" would be a better word to use

The PRESIDENT suggested the expression "systematic canvassing"

Dr MCVAIL said he would like to know whether the Council intended to take action in this matter He would like to know whether next November or next May they intended to proceed against practitioners who did the thing complained of If they did not intend to take action then they should not pass this resolution which would only be the expression of a pious opinion

Mr TICHBORNE said he favoured Mr Brown's motion declaring that this conduct was unprofessional

Sir JOHN BATTY TUKE said that he would like to get some assurance that this was not the first stage in the construction of a new crime They were certainly wasting time if they were merely going to say that this or the other thing was very naughty

Dr GLOVER, replying on the whole debate, said he was perfectly willing to substitute for "touting" the words "systematic canvassing," although he considered the former a very expressive and well understood word As to whether this motion was a piece of piety or a piece of resolution he said that so far as he was concerned it was a piece of intention and resolution and he thought that the words of the motion were quite sufficient to give notice to practitioners that if they lent themselves to such a system as he had illustrated and evidence was produced before the Council of a clear and satisfactory character, showing their implication in it, that the Council would be prepared to use their disciplinary powers In doing so they should be supporting a long and strong tradition of the profession He would remind the Council that they had the opinion of the judges that it would be most natural and proper in a body like this to object to such a system of touting and canvassing He assured the Council that so far as he was concerned he was in earnest in this matter

The motion, altered to read "associations by which systematic canvassing and advertising," was then put to the Council and carried, no member holding up his hand against it

Dr GLOVER gave notice that he would put upon the programme a motion to forward to the bodies concerned copies of both resolutions

In the body of the committee's report the passage beginning "the general tenour of the complaints made to us is that canvassing on a large and promiscuous scale is practised" was made to read "promiscuous canvassing on a large scale"

The Recovery of Fines

The Council received the following recommendation from the Penal Cases Committee adopted on April 28th, 1899, in connexion with the penalty recently paid by Mr T R

Allinson and retained by the Receiver of Police in regard to which Mr Muir Mackenzie had advised that this was a proper case to take into the courts to test the point of law relating to penalties —

That the committee recommend the Council to bring an action for the recovery of the fine and to instruct Mr Farrer to that effect.

The Executive Committee on May 29th passed the following resolution on this subject —

That the Executive Committee approve of the recommendation of the Penal Cases Committee and advise the Council to take the legal proceedings referred to and that the documents be referred to the Committee on Fines under the Medical Acts.

The Council also received the following report from the Committee on Fines under the Medical Acts, viz. —

The Committee on Fines, while thinking that the answer of the Home Secretary on the subject of fines under the Medical Acts should have been directly referred to them for consideration, approve of the action taken by the Penal Cases Committee and the Executive Committee respectively in obtaining Mr Muir Mackenzie's opinion relative to the legality of the claim of the Receiver of the Metropolitan Police to take all such fines.

The committee further approve of the recommendation made by Mr Muir Mackenzie that an action-at-law should be undertaken by the Council to test the claim above stated.

J G GLOVER, Chairman.

The Colonial List

On the motion of Mr HORSLEY, seconded by Dr BRUCE, it was agreed —

That the application of Miss Rachel Cohen, M.B. Calcutta, to register in the Colonial List the diploma F.R.C.S.I which she has obtained be acceded to, and that the Registrar be directed in future to register additional or higher qualifications in the Colonial List.

The Case of Alfred Freeman

The Council sat for a considerable time during this afternoon *in camerâ* and among the decisions arrived at was the following —

That the recommendation of the Executive Committee respecting the case of Alfred Freeman be adopted and that accordingly the Registrar be instructed to restore the name and qualification of Alfred Freeman to the Medical Register

The Council adjourned

WEDNESDAY, JUNE 7TH

The Council resumed to-day, Sir WILLIAM TURNER being in the chair

Medical Aid Associations

In the course of adjusting the minutes of the previous sitting the Council altered the resolution with regard to medical aid associations so as to read at the close

Associations which systematically practise canvassing and advertising for the purpose of procuring patients.

The "Abounding Eloquence" of Members

Mr CARTER said he should like to make a suggestion in favour of the despatch of business They were all of them exceedingly anxious to conclude the business of the session as quickly as possible and they were all of them conscious that the recent sessions of the Council had been a good deal prolonged. Their last session which might have been finished in five or six days was extended to nine days and they were all of them conscious that that was largely due to the abounding eloquence of certain members of the Council, two of whom in five or six days made between them 133 speeches It might be conducive to the despatch of business if there was an understanding that no member should speak more than three times on each motion

The Proceedings against the late Mr H K. Hunter

The first item of business on the programme was a notice by Mr HORSLEY, 'To draw attention to the proceedings taken in the name of the Council against the late Mr H K. Hunter, L.S.A.' After some preliminary discussion the Council decided to postpone the matter until to-morrow and to ask the legal assessor and the solicitor to be in attendance then

The Efficiency of Examinations

Mr HORSLEY moved

That this Council records its opinion that by Sections 18 and 20 of the Medical Act 1858, the duty is imposed on the Council of inquiry into and securing as far as possible the efficiency of any examination which confers any registrable qualification mentioned in Schedule A of the said Act.

He explained that he and Dr Bruce had put this motion on the paper from the purely academic point of view and he trusted that it would not be necessary for him to repeat the observations he made the other day relative to the interpretation of the Medical Acts He would only once more ask the Council to think in reading the Act, as he did, that Section 30 did not in any way invalidate the application of Sections 18 and 20 That was all he asked the Council to affirm by this motion

Dr BRUCE seconded the motion

The PRESIDENT asked Mr Horsley to show the bearings of Section 3 of the Act of 1886 upon this question

Mr HORSLEY replied that the bearing of Section 3 of the Act of 1886 upon this question was to his mind *nil* That section for the first time introduced a new feature into the Medical Acts It introduced a statutory statement as to the bare minimum upon which a man could gain entry to the Register But if they were to interpret Section 3 of the Act of 1886 in the manner indicated by some members of the Council the other day then they should have to say that the term "qualification" was restricted absolutely in the sense of the Act of 1886 But if that were so of course the Legislature would have repealed the Act of 1858 altogether or at any rate those sections in which such a restricted term appeared

The PRESIDENT said there was another question he would like to ask Had Mr Horsley considered whether the Registrar of the Council would be in a position to decline to put on the Register as an additional qualification a Fellowship for which there had been no examination? Had he considered how that bore upon the point raised in the motion?

Mr HORSLEY said it did not bear upon the point at all. It was a question no doubt of great importance, but it was one for discussion, and a very fit one for discussion, by the Council The only thing that could be said in relation to a matter of that kind was that this Council had recognised certain qualifications for which in most instances an examination was required, but he was not aware that this Council, in expressing its recognition of any Fellowship for instance, had laid down the condition that it must be secured by examination He thought it ought to have done so, but that was another matter He was not aware that this Council had in any way made that a condition and until it did make it a condition then he submitted that this did not come into his point.

Dr MACALISTER said that Section 20 of the Act of 1858 appeared to him directly to contemplate such qualifications as might follow a course of study and examination and no others The section said "In case it appear to the General Council that the course of study and examination to be gone through in order to obtain any such qualification from any such college or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their profession, it shall be lawful for such General Council to represent the same to Her Majesty's most honourable Privy Council" That seemed to him to limit the qualifications to those obtained after a course of study and examination and the sufficiency of these examinations was naturally a matter which could be inquired into if the qualification was one which admitted to the Register and not otherwise He did not see how they could get out of that

Dr BRUCE said that the view of the matter which he took was that as long as men were allowed to be put on the Register they should not shut the door against inquiry into the nature of their qualification

After further debate a vote was taken, when seven members voted for the motion, nine members voted against it, 12 did not vote on either side, and two were absent The motion was accordingly lost

The Legal Advisers

In response to a question addressed to the chair by Mr HORSLEY the REGISTRAR read a memorandum giving a historical account of the position of the legal assessor and the solicitor to the Council

Procedure in Dental Penal Cases

Mr TOMES brought up a recommendation from the Dental Committee as to adopting a new standing order for regulating procedure in dental penal cases The Council decided that the new standing order required some adjustment and its adoption was in consequence postponed.

The Committee on Dispensing

On the motion of Mr TEALE the name of Mr Carter was added to the Committee on Dispensing

The First Year of Medical Study

The next business was the reception of a report by th

Education Committee on the regulations of the Conjoint Boards in England and Scotland concerning the first year of medical study

A large part of the report was devoted to a historical review of the situation too long to summarise Following this there were the following "remarks by the committee," viz —

The committee in presenting the foregoing historical statement desire to call the attention of the Council to the two questions, distinct but interconnected which it involves. First, the question whether a year of scientific study before registration should in exceptional cases be recognised as constituting one of the five years of the medical curriculum Second, the question whether a year of scientific study taken after registration, but in an institution of the status and character of an ordinary secondary or grammar school, should regularly be recognised as constituting one of the five years required

The first question is that raised by the enactment of Section X of the Scottish Universities Ordinances. The committee and the Council repeatedly protested against this section both as being a dangerous precedent and as unnecessary for the relief of the *bond fide* cases of exception contemplated by the Commissioners. Experience seems to have justified the protest on both grounds. According to the information before the committee Section X has not been utilised to any great extent. In Aberdeen no cases of exemption have occurred, in Edinburgh five, and in Glasgow four But the committee understand that in all the cases examinations qualifying for registration had been passed indeed in two of the Glasgow cases the applicants for exemption were already graduates in arts. The section was therefore for its proposed purpose superfluous as any formal difficulty it was devised to remove could have been met in other ways to which no objection could be taken But the example set by this enactment has apparently had the influence which the Council apprehended and the new regulations of the Conjoint Boards in England and Scotland illustrate the manner of its operation.

The second question had it been formally raised at the time when the Conjoint Board in England obtained from the Council the concession that scientific study before registration should qualify for the first examination, would in the committee's opinion have been answered in the negative by the Council. One chief object of the Council's action has been to secure that ordinary school work should be completed and tested by a sufficient preliminary examination before the course of medical study was begun. It has been felt that to be truly profitable to the medical student his work at the ancillary sciences should be conducted under higher conditions and under better safeguards as to efficiency than can be looked for in secondary schools, the majority of whose pupils are still boys and girls. The wholesale recognition of ordinary day schools as teaching institutions in which the first year of medical study may be pursued must practically frustrate this object and bring about the result foreseen by the committee in their report of May 24th 1894 They would in particular call the Council's attention to the following paragraph:—

The committee, however cannot help regarding the system with considerable distrust: First, because in practice it may tend to the recognition of an inferior class of schools secondly, because the standard of examination in science may as a consequence be so lowered as practically to lead to the waste of the first year of study thirdly, because it does not explicitly provide for any preliminary examination in the ordinary school subjects before the special scientific subjects are begun and fourthly because though the Conjoint Boards have safeguarded their system by requiring five years of medical study after registration of such schoolboy students, it is open to any other licensing body to require only four years.

As to the remedy, the committee still feel the difficulty pointed out in their report of 1894 of the Council taking action in regard to the inspection and direct recognition of teaching institutions.' But it appears now that the check proposed by the committee and adopted by the Council on the recognition of such institutions "after due inspection by the licensing bodies has proved insufficient in two ways. In the first place contrary to the Council's intention a considerable number of secondary and even of board schools have been admitted to recognition in the second place, the duty of inspection delegated to the licensing bodies has not been carried out in all cases.

The committee have definitely ascertained that the Conjoint Board in England has recognised certain 'teaching institutions for the purposes of instruction examination, and registration, without the guarantee which inspection affords that the said institutions are adequately equipped and efficiently conducted The chairman of the committee wrote to the secretary of the Board on Feb. 8th asking whether the following schools had been inspected Nonconformist Grammar School Bishop's Stortford Bristol Grammar School The Grammar School, Bromyard Felsted School, Felsted Higher Grade Board School, Hanley Mercers School Holborn Higher Grade Board School, Norwich Higher Grade Board School Portsmouth Grammar School, Portsmouth Forest Schools, Walthamstow Grammar School Woodford, Essex. The following is the reply:—

Examination Hall Victoria Embankment,
London, W C. March 21st, 1899

DEAR SIR JOHN BATTY TUKE —I have now submitted your letter of the 3rd ult. to the committee of management of this board and I am desired to inform you that the following resolution was adopted by them in reference to your request for information as to the recognition of institutions viz. —

'That whilst the committee of management are of opinion that the question of the recognition of institutions is entirely one for the respective examining bodies to determine for themselves Sir John Batty Tuke be informed that the following schools mentioned by him have been visited and reported on favourably by members of the committee viz.: Felsted School, Mercers School Holborn Higher Grade Board School Portsmouth Forest School, Walthamstow Bancroft School, Woodford Essex; and that the others mentioned by him were accepted after the committee had satisfied themselves that the schools fulfilled the requirements of and were recognised by, the South Kensington Science and Art Department.'

I return your marked list of schools.

Yours very truly,
FREDERIC G HALLET, Secretary

Sir John Batty Tuke, M.D.

The committee have thus to report that the recognition of 'teaching institutions where physics, chemistry and elementary biology are taught" without due inspection, is not in accordance with Resolution II agreed to by the Council on Dec. 4th 1894

It therefore appears to the committee necessary that the Council should now take a further step. The licensing bodies should be informed that schools for boys and girls were not intended by the Council to be regarded as institutions at which the first of the five years of medical study may be spent and the Council should require that before registration is effected a student should have commenced medical study at a university or school of medicine or at a scientific institution recognised by one of the licensing bodies *and approved by the Council.* If this were done the recognised institutions would not merely, as now be reported to the Registrar, but would come in a regular and formal way before the Council for its approval. Attention could thus be drawn to any institution regarding which objection might be taken and approval withheld if the evidence as to its status and efficiency were unsatisfactory As registration is a matter over which the Council alone has control this manner of dealing with the difficulty appears to be the least open to objection.

RECOMMENDATIONS

I. That the regulations in regard to registration from and after Jan. 1st, 1900, be amended as follows:—

REGULATIONS IN REGARD TO REGISTRATION

No medical student shall be registered until he has passed a preliminary examination as required by the General Medical Council and has produced evidence that he has commenced medical study at a university school of medicine, or scientific institution recognised by one of the licensing bodies and approved by the Council.

Each of the branch registrars shall keep a register of medical students according to the subjoined form.

Form for the Registration of Medical Students

Name.	Preliminary examination of arts, with date thereof	Date of Registration.	Place and date of commencement of study as certified by an official of a university, school of medicine, or scientific institution approved by the Council.

II That the Registrar be directed to call the attention of the licensing bodies to the foregoing resolution.

The report was formally received and entered on the minutes

Sir JOHN BATTY TUKE, seconded by Dr MACALISTER, moved the adoption of the first recommendation

The PRESIDENT said that as he understood the situation the change recommended by the committee was the insertion of the words "and approved by the Council"

Mr CARTER asked whether it was proposed to institute inspection of the bodies because if it was not then he failed to see how they were going to proceed.

The PRESIDENT pointed out that the Council had no power under the Act to inspect teaching institutions

Mr CARTER said he would like to know how they were going to reach the mental condition of approval.

Sir CHRISTOPHER NIXON suggested that the licensing bodies could inspect the institutions and this Council could act upon their report

Sir RICHARD THORNE said it was no uncommon thing for a Government department to approve a thing without actually inspecting it

Dr MACALISTER said that registration was a matter for this Council alone and it was suggested that it should only take place in connexion with institutions which had been brought formally before the Council and had been approved by the Council in the sense that no objection had been raised to them What happened at present was that the body sent up to the Registrar a list of the institutions which during the year had been recognised after due inspection by the body and that list remained in the hands of the Registrar, and the Council never said anything about it It was surely desirable that this list should come before the Council and be put in print and circulated and if a member happened to see on the list an institution about which he had views or information then he could raise a question about it in the Council and the matter could be discussed All they wanted was to give the members of the Council an opportunity to object to any institution which, in their opinion, ought not to be recognised

Mr BRYANT said that this report contained a principle which he was afraid his College (the Royal College of Surgeons of England) could not accept Hitherto this Council had allowed all the examining bodies to select the institutions they recognised, and in the case of his own

College there were a few institutions which had not been inspected though they were recognised If the Council objected to the want of inspection he had little doubt it could be arranged. But he did not see why it was necessary that the institutions recognised should be approved by this Council In such a matter the Council must rely on the examining body which was responsible for the selection

Sir DYCE DUCKWORTH said his position as the representative of the Royal College of Physicians of London was the same as that of Mr Bryant This was a new departure with a vengeance and one which would destroy the autonomy of the Royal Colleges who held their privileges by charter and who meant to stand by these privileges whatever the Council might say or do He could not help thinking that this recommendation was presented under a false conception of the duties of the Council

Mr CARTER said that he was afraid this recommendation would weaken the sense of responsibility in the examining bodies themselves

Dr CHURCH proposed that the old form should be retained

Sir PHILIP SMYLY said that he had been instructed to see that the five years' course of study was not cut down to four years

Sir RICHARD THORNE remarked that according to the speeches made during the afternoon the proposed action of the Council was absolutely illegal He sympathised very much with the report He was perfectly satisfied that an attempt was being made to whittle away the five years' system, but if the Council could not resist this he did not see why they should beat the air with a resolution of the sort now before the Council

Sir WILLIAM THOMSON strongly supported the recommendation of the Education Committee He maintained that the Conjoint Board for England was pursuing a course of action which was offering a four years' course instead of the five years curriculum recommended by the Council He maintained further that this action was in absolute opposition to the Council's requirements and recommendations and yet from their statements the representatives of the Royal Colleges of England apparently intended to stand by the position which they had assumed He (Sir William Thomson) wanted to know what the Council now proposed to do He had been of opinion that the Council had direction of these things, and it was for them to see that they were carried out But according to what they had heard to day all those considerations were to be put aside by the two Royal Colleges of England, who seemed to say that independently of anything that the Council proposed they would do what they liked If the Medical Council was impotent in regard to its own rules there was no use in coming here at all. He was perfectly sure that the Council had no intention of making study in science at a grammar school equivalent to a first year's medical course There was no question that what the Council intended was that the first year's medical study should be study at a university, medical school, or "scientific institution approved by the Council" That was exactly what they wanted to-day He could not understand how they were met at the threshold by two powerful corporations saying that they would not obey the General Medical Council. If they had to face such disobedience on the part of medical licensing bodies the sooner the Council ceased to issue recommendations the better it would be for their dignity In conclusion, he asked the Council to accept the committee's report.

Sir CHRISTOPHER NIXON said that as a member of the Education Committee and the representative of the Royal University of Ireland, he wished to state that the authorities of that University had most rigidly carried out the recommendations of the General Medical Council in respect to the five years' curriculum So far as the University course of study for the first year was concerned it was strictly in accordance with this Council's recommendation, and he was perfectly certain that nobody in Ireland would think that they could get the first year's medical study at a place other than a recognised medical school If one or two representatives of the licensing authorities declared that they would not be bound by the regulations of the General Medical Council he thought the time would come when other corporations would also say that they would disobey and that, in his view would be very detrimental to the medical profession The General Medical Council wanted to have as they ought to have, control over the various licensing bodies recognised and it was for the Council to say whether the Council should or should not recognise certain institutions He took the present case as a test one If the Council felt that it was not in its power to deal with such a case it would perhaps throw out the recommendation of the Education Committee, but if it did that he was afraid that they would be going on the downward path and all that they had done in the way of advancing education would be lost

Mr BROWN hoped that the Council would adopt this report without any fear of the dire consequences which some members had threatened He maintained that if the first year of study was to be study in science in a grammar school that would be a disastrous thing for medical education If they recognised grammar-school education they would have boys of 14 or 15 years of age entering upon the second year of professional study He should strongly support the committee in their recommendations

Dr MACALISTER maintained that the Colleges, the Conjoint Board, had kept strictly within the letter of the law

Sir J BATTY TUKE Yes, within the strict letter of the law

Dr MCVAIL supported the committee in the report that they had made He thought, however, that that report was too mild and that it ought to have been couched in very much stronger language In his opinion it would be ridiculous if the two Colleges in question and the General Medical Council were to go before the Privy Council on such a trifling matter

Dr LOMBE ATTHILL expressed the opinion that a systematic effort was being made to whittle down the five years' course He objected to that, notwithstanding that he believed that medical students now did not get such good education as they got under the four years' curriculum.

The PRESIDENT said that the point at issue really was this—it was not that the two London Colleges declined to submit to the Council's recommendations, but, as he understood their contention, they declined to limit their functions to the question of approval

Sir WILLIAM GAIRDNER said that he felt considerably relieved by Dr MacAlister's remark that the Conjoint Board were keeping within the letter of the law, although they might have expanded their ideas He reminded the Council that they were confronted by an educational movement which amounted practically to a revolution—that was to say, science had been introduced into the school curriculum to a much greater extent than it was thought some years ago that it would be possible to introduce it The Council must take care that in anything they did they did not hamper this educational movement which was distinctly of the greatest importance not only to the medical profession, but also to other departments in the social system He did not think that the Council should interfere with that movement at all On the contrary, he was of opinion that the movement in question should be taken full advantage of Yet he was of the view that nothing of science which was taught in school should count as part of the medical curriculum

Dr BRUCE said that he entirely sympathised with the view of Sir William Gairdner as to the great advantage of science being taught in the grammar school, but as they had put it in their regulations that a certain amount of science was a part of that medical study it seem to him quite plain that the matter came within the purview of the General Medical Council Therefore it was the Council's duty to see that the subjects were properly taught

Mr TEALE said that it struck him that there were just two points that had not been particularly referred to during this discussion When the Council decided upon adding a fifth year to the curriculum it was understood that the fifth year was to be a clinical year Then members of Council thought that as there was to be a period of five years for study they might as well decide upon introducing elementary subjects which had not been required before That introduced a difficulty an entanglement, and he was quite certain that the efforts of the Royal Colleges of England had been put forward to get over that entanglement He believed that the Royal Colleges wished to make a genuine attempt by what they proposed to get rid of this first year's entanglement of study, they being of the belief that the first year's study had been spoilt by the addition of these preliminary subjects

After some further conversation, in the course of which the PRESIDENT said that there was nothing before the Council but the motion of Sir John Batty Tuke

Dr CHURCH said that he was prepared to move as an amendment the following

That in the regulations in regard to registration the word "scientific" before institution" be omitted, and that the concluding words approved by the Council" be also omitted.

Mr TEALE seconded this proposal

Sir JOHN BATTY TUKE, in reply on the whole debate, expressed regret that the only amendment to the committee's proposal had come from a member of the committee He was sorry to inform some of the lately appointed members of the committee that as the Medical Acts were generally read the General Medical Council had comparatively little power over medical education, but he had always held, and still held, that they had great power in this—the loyalty of the various licensing bodies to the General Medical Council That was a moral force If it had not been for it medical education would not have arrived at its present advanced state And he must say that the speeches of the two representatives of the two English Colleges ought not to have been heard that day He was charitable enough to believe that there was a considerable amount of misunderstanding as regards the loyalty of these two bodies to the General Medical Council, and he hoped that their future action would show that that was correct

The Council divided on the amendment proposed by Dr Church, with the result that nine voted for the amendment and 16 against it On the names being called and the numbers taken it was found that 17 were against the amendment and nine for it

The amendment accordingly was rejected,

Mr BRYANT rose, he said, to propose a further amendment He did think that his College—the Royal College of Surgeons of England—or rather the Conjoint Board of England, had on this occasion been badly treated by the Council Whether it was an intentional misunderstanding of the fact of the case he did not know, but he thought they had not been well treated It was not their fault if there was anything wrong in regard to teaching institutions recognised by the Council, for he had repeatedly stated that the principle of the management of the two Colleges had been to visit and inspect every institution which had been recognised by them No doubt at the beginning some had been excluded at the instance of the South Kensington authorities, but what he distinctly told the Council now was that they would be perfectly willing to undertake the visiting and inspection of even these excluded institutions He proposed —

That the following be adopted instead of the recommendation of the committee—namely that the list of recognised teaching institutions forwarded to the Registrar at the beginning of each year be returned to the next following meeting of the Executive Committee and printed in the minutes of that committee for the information of the Council.

Sir J BATTY TUKE said that this amendment was no more than a repetition of what the Council had already voted upon and rejected

On a division eight voted for the amendment and 18 against On the original motion being put to the vote it was carried by 18 votes to six, five members declining to vote and one being absent

On the motion of Sir J BATTY TUKE, seconded by Dr MACALISTER, it was unanimously agreed that the Registrar should be directed to call the attention of the licensing bodies to the resolution just arrived at

Penal Cases Committee

On the motion of Dr BRUCE, seconded by Dr ATTHILL, it was agreed—

That the number of the members of the Penal Cases Committee be the same as that of the Executive Committee—viz. eight exclusive of the President, four from England two from Scotland and two from Ireland.

The Council adjourned

PROVIDENT MEDICAL ASSOCIATION—By the invitation of Lady Hope and Mr T A Denny a drawing room meeting was held at 7, Connaught-place on Tuesday, June 6th, in support of the work of the Metropolitan Provident Medical Association, the object of which is to provide efficient medical treatment for those of the working classes who are unable to pay the usual fees on a system of mutual assurance by small periodical payments There are 20 branches, 15 of which are dispensaries and five medical clubs, from which 11,441 membership cards, family and single were issued last year, the payments amounting to £5304 A resolution to the effect that it was necessary to work in coöperation with the hospitals under rules approved by the medical profession, and that branches should be formed in every district in London on the system of this association was carried

Medical News.

FOREIGN UNIVERSITY INTELLIGENCE—*Amsterdam* Dr H Timmer has been recognised as *privat docent* of Orthopædics —*Bahia* Dr Joaquim Matheus dos Santos has been appointed Professor of Hygiene —*Graz* Dr E Payr has been recognised as *privat docent* of Surgery —*Kieff* Dr J Landenbach has been appointed to the chair of Pharmacology

ROYAL COLLEGE OF PHYSICIANS OF IRELAND—At the monthly meeting of the College held on June 2nd Mr George Thorpe, L S A, having passed a special examination for the Licence in Medicine of the College, was admitted by the President and Fellows to the Licence

ROYAL COLLEGE OF SURGEONS IN IRELAND—At a meeting of the Fellows held on June 5th the following officers were elected for the ensuing year —President Mr Robert Lafayette Swan Vice-President Dr Thomas Myles. Honorary Secretary Sir Charles A. Cameron, C B Council Professor Archibald H Jacob, Professor Edward Hallaran Bennett, Sir Philip Crampton Smyly, Sir William Stokes, Mr Henry Rosborough Swanzy, Professor William Stoker, Dr William Ireland Wheeler, Sir William Thomson, Mr Austin Meldon, D L, Sir Charles A Cameron, C B, Dr L Heperstal Ormsby, Dr Richard D Purefoy, Dr John J Cranny, Mr Henry Gregg Sherlock, Professor John B Story, Dr Henry Fitzgibbon, Dr Francis T Heuston, Mr John Lentaigne, and Dr Richard Bolton M'Causland

THE DEVON QUEEN VICTORIA COMMEMORATION FUND —The Finance Committee of this fund reported on May 29th that the fund now consists of £5800, giving a net income of £173 together with reversions which will come in at the expiration of existing leases A scheme is to be submitted for the distribution of this amount among hospitals and convalescent homes The committee appeal for further subscriptions and hope that a renewed effort will be made to endow the County Hospital Fund with an income sufficient to give material assistance to the various medical institutions of Devonshire

THE "STREETS AND SQUARES BAZAAR" IN AID OF ST MARY'S HOSPITAL —On June 6th and 7th a bazaar in aid of St Mary's Hospital and the Clarence Memorial wing was held at the Hotel Great Central in the Marylebone road, London On the first day the bazaar was opened by H R H Princess Louise, Duchess of Fife, who was accompanied by her husband, the Duke of Fife The stalls, which were 28 in number, were named after some of the principal streets, squares, and thoroughfares in the west and north west of London and many of the charitable ladies who presided over them were well known leaders of fashionable society Members of the theatrical and musical professions lent their aid in making the bazaar a success and the bands of the Royal Horse Guards and the Royal Engineers played during each day It is to be hoped that the hospital will be benefited by a large amount The management of the hotel very generously handed over the whole of the receipts for luncheon and dinner received on June 6th to the funds of the hospital

THE DROITWICH BRINE BATHS —A new station on the Great Western Railway which marks a decided advance in the progress of the old town of Droitwich was opened on June 3rd Of recent years much has been done to attract visitors to English health resorts and bathing places and at Droitwich, which has come in for its share of increased popularity, the old station has been found to be too small to accommodate the increasing number of visitors, hence the building of the new one The opening ceremony was performed by Sir A F Godson M P, in the unavoidable absence of Mr Corbett, who gave the ground on which the new station was built Mr D M'Iver, a director of the Great Western Railway Company, remarked on the present occasion that Droitwich Station was opened in 1852 and that 12 years later there were only seven trains daily between it and London, the fastest train taking five and a half hours to make the journey Now there were

Mr TEALE seconded this proposal

Sir JOHN BATTY TUKE, in reply on the whole debate, expressed regret that the only amendment to the committee's proposal had come from a member of the committee He was sorry to inform some of the lately appointed members of the committee that as the Medical Acts were generally read the General Medical Council had comparatively little power over medical education, but he had always held, and still held, that they had great power in this—the loyalty of the various licensing bodies to the General Medical Council That was a moral force If it had not been for it medical education would not have arrived at its present advanced state And he must say that the speeches of the two representatives of the two English Colleges ought not to have been heard that day He was charitable enough to believe that there was a considerable amount of misunderstanding as regards the loyalty of these two bodies to the General Medical Council, and he hoped that their future action would show that that was correct

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FOREIGN UNIVERSITY INTELLIGENCE—*Amsterdam* Dr H Timmer has been recognised as *privat docent* of Orthopædics—*Bahia* Dr Joaquim Matheus dos Santos has been appointed Professor of Hygiene—*Graz* Dr E Payr has been recognised as *privat docent* of Surgery—*Kieff* Dr J Landenbach has been appointed to the chair of Pharmacology

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.—At the monthly meeting of the College held on June 2nd Mr George Thorpe, L S A, having passed a special examination for the Licence in Medicine of the College, was admitted by the President and Fellows to the Licence

ROYAL COLLEGE OF SURGEONS IN IRELAND—At a meeting of the Fellows held on June 5th the following officers were elected for the ensuing year —President Mr Robert Lafayette Swan Vice-President Dr Thomas Myles. Honorary Secretary Sir Charles A Cameron, C B Council Professor Archibald H Jacob, Professor Edward Hallaran Bennett, Sir Philip Crampton Smyly, Sir William Stokes, Mr Henry Rosborough Swanzy, Professor William Stoker, Dr William Ireland Wheeler, Sir William Thomson, Mr Austin Meldon, D L, Sir Charles A Cameron, C B, Dr L Heperstal Ormsby, Dr Richard D Purefoy, Dr John J Cranny, Mr Henry Gregg Sherlock, Professor John B Story, Dr Henry Fitzgibbon, Dr Francis T Heuston, Mr John Lentaigne, and Dr Richard Bolton M'Causland

THE DEVON QUEEN VICTORIA COMMEMORATION FUND—The Finance Committee of this fund reported on May 29th that the fund now consists of £5800, giving a net income of £173 together with reversions which will come in at the expiration of existing leases A scheme is to be submitted for the distribution of this amount among hospitals and convalescent homes The committee appeal for further subscriptions and hope that a renewed effort will be made to endow the County Hospital Fund with an income sufficient to give material assistance to the various medical institutions of Devonshire

THE "STREETS AND SQUARES BAZAAR" IN AID OF ST MARY'S HOSPITAL—On June 6th and 7th a bazaar in aid of St Mary's Hospital and the Clarence Memorial wing was held at the Hotel Great Central in the Marylebone-road, London On the first day the bazaar was opened by H R H Princess Louise, Duchess of Fife, who was accompanied by her husband, the Duke of Fife The stalls which were 28 in number, were named after some of the principal streets, squares, and thoroughfares in the west and north west of London and many of the charitable ladies who presided over them were well known leaders of fashionable society Members of the theatrical and musical professions lent their aid in making the bazaar a success and the bands of the Royal Horse Guards and the Royal Engineers played during each day It is to be hoped that the hospital will be benefited by a large amount The management of the hotel very generously handed over the whole of the receipts for luncheon and dinner received on June 6th to the funds of the hospital

THE DROITWICH BRINE BATHS—A new station on the Great Western Railway which marks a decided advance in the progress of the old town of Droitwich was opened on June 3rd Of recent years much has been done to attract visitors to English health resorts and bathing places and at Droitwich, which has come in for its share of increased popularity, the old station has been found to be too small to accommodate the increasing number of visitors, hence the building of the new one The opening ceremony was performed by Sir A F Godson, M P, in the unavoidable absence of Mr Corbett, who gave the ground on which the new station was built Mr D M'Iver, a director of the Great Western Railway Company, remarked on the present occasion that Droitwich Station was opened in 1852 and that 12 years later there were only seven trains daily between it and London, the fastest train taking five and a half hours to make the journey Now there were

Notes, Short Comments, and Answers to Correspondents.

THE GEOGRAPHY OF MEDICAL ETHICS.

We publish below under the heading, "Medical Ethics in Denmark," a letter from a correspondent who has met with conduct at the hands of a Danish fellow practitioner which would be considered by British medical men decidedly unprofessional. He publishes the statement of the way in which he was treated by his confrère from Copenhagen hoping that the letter will meet the eye of some leading Danish practitioner who could give an authoritative account of the ethical rules which govern the medical profession in Denmark.

We have no hesitation in admitting our ignorance of the laws that govern the behaviour of professional men towards one another in Denmark, for the subject of medical ethics is one upon which there has been as yet no interchange of national experiences. It is natural to suppose that the English system of medical ethics and etiquette, founded as it is upon that excellent supplementary commandment, "Do unto others as ye would be done by," has its counterpart throughout civilised nations. But though the broad principles of medical etiquette may be the same in all European and other advanced countries the details will often differ. For medical ethics is the term we use for the adaptation of the noble precept we have quoted to the medical man's work-a-day life and the conditions of that life differ with its geographical position. The principles of medical ethics should know no geography, but the application of the principles will have different conditions under different skies. It is possible that in a short time more will be known as to the way in which different nations regard the problems of medical ethics. As a Special Commissioner of THE LANCET has already pointed out (see THE LANCET, May [illegible]) a French Ministerial decree has proclaimed that during the Universal Exhibition of 1900 an International Congress will be held in Paris entitled, "Congrès International de Médecine Professionnelle et de Déontologie Médicale." This congress has been organised to discuss all the numerous and complex questions that fall under the heads of medical politics and medical ethics, and if the movement receives proper support the foundation should be laid of a system of medical ethics that would be not English or French or Danish, but universal. We do not expect this result to follow immediately upon the Congress, but we do expect a [illegible] outcome of an international discussion of "[illegible]" ([illegible]) binding [illegible]—the science of duty, to use the French term. It is undoubted that nowadays the [illegible] of the medical practitioner is not a simple one either in England or elsewhere. The modern medical man's work has immensely increased, his responsibilities have multiplied, his critics have become more numerous, and his remuneration has been much cut down. Great Britain is not the only country where medical aid associations defraud him of his work, nor is it the only country where the rampant claims of the quack are subject to no legal restrictions. It seems to us that a well-conducted congress at which really representative persons from all civilised nations should be present to discuss questions relating to medical ethics would [illegible] result in an interchange of valuable experiences. Every nation represented would be put into possession of mutual knowledge regarding the ethical laws guiding the medical profession in other nations which would prevent persons from behaving to each other as "S" alleges the Danish practitioner behaved to him.

But in bringing the International Congress on Medical Ethics for a second time before our readers and in emphasising the value that may under favourable circumstances result from its deliberations we wish to point out that the whole value of such a congress will disappear if the debates are flooded by the loose talk of irresponsible [illegible] instead of being carried on by duly accredited delegates. We trust that our country will be represented at the Congress as far as possible by the officers of medical societies, medical associations, ethical unions, and defence unions, and that well prepared and properly authenticated reports will be forthcoming which will give clearly a picture of what may be called the non-scientific side of the medical man's life, its dangers and the value of unions and concerted action in warding off such dangers.

MEDICAL ETHICS IN DENMARK.

To the Editors of THE LANCET.

SIRS,—It would be unjust to form an opinion as to the medical ethics of a country from the procedure of one man but I have recently had a most unpleasant affair with a Danish gentleman who announces himself in the newspapers as "Professeur libre de l'Université de Copenhagen," and I would be pleased if this letter should meet the eye of some leading Danish practitioner so that an authoritative opinion may be given as to the rules which govern the profession in Denmark. The facts briefly stated are these. S, a Scotch graduate, has been in practice in a Brazilian city for about nine years where, besides general practice, he has a hospital and several well remunerated appointments. G, a Danish graduate, practised in this city up to about [illegible] years ago. Since then he has been in Copenhagen practising as an ophthalmic surgeon, and on several occasions he has paid visits to this city for business purposes for a few months at a time, occupying at S's invitation the same office and devoting himself almost entirely to his speciality—viz., the eyes. Last year hearing that G was coming here for business reasons, S proposed that G should take S's practice for six months while S took a holiday at home. S was not obliged to offer his practice to G as he had on former occasions made quite satisfactory arrangements with two confrères to divide his work between them. But thinking the proposed arrangement with G would be a mutual benefit S gave him the preference. G occupied S's house and office, had the use of his horses and carriages, paid house and office rent out of proceeds of practice and kept two-thirds of the net result, S having one-third. This arrangement was only agreed to by G after it had been submitted to the arbitration of a mutual friend, he (G) asking for still better terms. His chief argument was that in leaving the practice to him S was doing much better than by leaving it to his other confrères because on S's return G would no longer be his competitor whereas any other confrères would. He also stated that his leave of absence from Copenhagen University was six months but that if S desired to stay away a year G could get the necessary extension. The arrangement made was one by which a good many hundreds of pounds went into G's pocket. In addition G was to be allowed to carry on his speciality in the proceeds of which S was to have no share.

On S's return in November he found that G had already taken another office for himself announcing in the papers that he was physician, surgeon and oculist and "professeur libre" of Copenhagen University. Later on S was surprised to hear that G had attended a lady in her confinement who had formerly been attended by S and still more to hear from the lady's husband who thought it rather strange that G had actually taken the engagement during the months that he was acting for S well knowing that S would have resumed at least two months before the expected confinement.

Again, one of S's appointments was that of medical officer to a bank paid by fixed salary. During S's absence a member of the staff—a [illegible] arrival during S's absence—came under G's care for treatment and he was still under treatment when S returned. G without even saying a word to S continued to attend this patient for some two months after S's return. In March S received an official communication from the sub-manager of this bank with whom S had had a disagreement about charges made to him for treatment of his wife informing him that he (S) was not being consulted by the members of the staff (which was not true except in the above-mentioned case and that of the sub-manager himself) and that it had been decided to dispense with S's services. S then called on G who told him that some time previously most likely at the time of the above disagreement of which G was quite cognisant, he had been called on by the sub-manager to know if he (G) would accept the appointment. His reply was that if all was made straight with S he would accept it but that he might be here only a few months more. In a subsequent letter G said to S that the sub-manager informed him that it had been spoken of before the suppression of S, and that if G did not accept the appointment it would be offered to some one else; also that G had considered the matter and S had spoken of and considered that his conduct had been perfectly correct. After this S wrote declining to continue on a footing of apparent friendship with G. I may say that so far no question of the relative competency of S and G has arisen and also that all this happened within three months of S's return from Europe. Apologising for the length of this communication,

I am, Sirs, yours faithfully,

May [illegible] S.

REMOVAL OF FOREIGN BODIES FROM THE NOSE.

To the Editors of THE LANCET.

SIRS,—The removal of foreign bodies from the nose is often a matter of some difficulty more especially when they have been forced or drawn by inspiratory—"snuffing"—efforts up the nostril. A simple manœuvre which I have successfully practised on such occasions is as follows. While the child lies on its mother's lap screaming, place a thin cloth or handkerchief over the mouth and face; place your own mouth to that of the child; then give a sudden forcible puff. The effect of this is to expel or at least to send forward, the contents of the nostrils. In this way I have blown a plum stone clean out of the nose and in other cases a button or other foreign body has been shifted so near to the external nares as to render it easy of removal and thus save a great deal of painful and difficult probing about in the recesses of the nostril. This procedure is not original but is so simple and useful that I have ventured to recall it to the notice of your readers.

I am, Sirs, yours faithfully,

HENRY E. BELCHER.

West Bridgford, Nottingham, June 1st, 1899.

"WHERE SHALL WE BUILD OUR NATIONAL SANATORIA FOR CONSUMPTION?"

To the Editors of THE LANCET.

SIRS,—Under the above heading there have lately appeared in the columns of THE LANCET letters from various correspondents drawing attention to Portishead as a place pre-eminently suited for the successful open-air treatment of pulmonary and allied diseases. As an old resident as well as a medical man I would emphatically endorse the statements of your correspondents in reference to the health-giving properties of this place. May I quote a case in point? An exem-

COUNTY AND CITY ASYLUM, HEREFORD—Assistant Medical Officer for 10 or 12 weeks. Salary £2 2s. per week, with board lodging &c.—Apply to the Medical Superintendent.

COUNTY ASYLUM, Rainhill near Liverpool.—Senior Assistant Medical Officer unmarried. Salary commences at £225 per annum, with prospect of increase to £250 with furnished apartments, board attendance, and washing

DUNDEE ROYAL INFIRMARY—Resident Medical Assistant for six months. Salary at the rate of £40 per annum, with board and washing

EDAY Orkney—Medical Officer male or female. Salary from the Parish Council £50, from the Medical Association £20. Applications to the Clerk of Parish Council, Eday

EVELINA HOSPITAL FOR SICK CHILDREN Southwark S E.—Junior Resident Medical Officer and Registrar Salary £50, with board and washing

FISHERTON ASYLUM—Assistant Medical Officer Salary £120 per annum to commence, with board, lodging, and washing—Apply to Dr Finch, The Asylum, Salisbury

GENERAL HOSPITAL Birmingham.—House Physician, for one year Salary £70 per annum, with residence board and washing

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION Gloucester—Physician.

GENERAL INFIRMARY, Leeds.—Honorary Assistant Ophthalmic and Aural Surgeon.

GERMAN HOSPITAL, Dalston.—Honorary Assistant Physician

GLASGOW CORPORATION—Bacteriologist in connexion with the Health Department of the City Salary at the rate of £350 per annum.—Applications to Clerk to the Corporation (Police Department) Glasgow

GORDON HOSPITAL FOR FISTULA, &c. Vauxhall Bridge-road London.—Surgeon to out-patients.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway road, N—Physician to Out patients.—Also Dental Surgeon.

GUEST HOSPITAL, Dudley—Assistant House Surgeon for six months. Salary £40 per annum.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST Brompton.—Resident House Physicians

HUDDERSFIELD INFIRMARY—Assistant House Surgeon Salary £60 per annum, with board, residence, and washing

KING'S NORTON UNION—Resident Deputy Medical Officer at the infirmary and the workhouse at Selly Oak near Birmingham. Salary £170 the first year rising £10 yearly to £200 per annum, with furnished residence. Rations or attendance not provided. Appointment subject to statutory deductions Applications to the Clerk 10 Newhall street Birmingham

KNIGHTON UNION—District Medical Officer and Public Vaccinator for the Llanbister Salary £100 per annum, with certain medical fees. Appointment subject to statutory deductions. Applications to the Clerk Knighton, Radnorshire.

LIVERPOOL DISPENSARIES, 34 Moorfields Liverpool—Assistant Surgeon, unmarried. Salary £100 with board and residence

LONDON COUNTY ASYLUM Claybury Woodford Bridge Essex—Junior Assistant Medical Officer male. Salary £150 per annum with board, furnished apartments, and washing Applications to the Clerk of the Asylums Committee 6, Waterloo-place, S W

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST—Assistant Medical Officer Honorarium £25 per annum.

MASON UNIVERSITY COLLEGE, Birmingham (with Queen's Faculty of Medicine)—Professorship of Physiology

NEW HOSPITAL FOR WOMEN 144 Euston road London—Female Senior Assistant to the Out-patient Department for Children for two years.

NEWPORT AND MONMOUTHSHIRE HOSPITAL.—House Surgeon Salary £100 per annum with board and residence (no stimulants provided)

OWENS COLLEGE, Manchester—Senior Demonstrator in Physiology Stipend £150 per annum rising to £200

ROSS UNION—Medical Officer for the Walford District Salary £63 10s. per annum (including all extra medical fees) and subject to statutory deductions. Applications to the Clerk Ross.

ROYAL BERKS HOSPITAL, Reading—House Surgeon Salary £60 per annum with board lodging and washing—Also Assistant House Surgeon Salary £30 per annum with board lodging and washing Appointments for one year

ROYAL HANTS COUNTY HOSPITAL, Winchester—House Physician unmarried Salary £65 per annum, with board residence &c. Also Honorary Physician in Ordinary

ROYAL HOSPITAL FOR DISEASES OF THE CHEST City road London.—Resident Medical Officer for six months. Salary at the rate of £100 per annum, with furnished apartments, board and washing

ROYAL SOUTH HANTS INFIRMARY Southampton—Assistant House Surgeon for six months. Salary at the rate of £50 per annum with board residence, washing &c.

ROYAL UNITED HOSPITAL, Bath.—House Surgeon on July 1st, for three months. Salary at the rate of £60 per annum, with board lodging and washing

SEAMEN'S HOSPITAL SOCIETY (*Dreadnought*) Greenwich S E—House Surgeon. Salary £50 per annum with board residence and washing Also Surgeon to the Dispensary 51 East India Dock road E Salary £63 per annum.

SHAFTESBURY HOUSE PRIVATE ASYLUM, Formby near Liverpool—Junior Medical Officer Salary £50 per annum, with board lodging and washing

STAFFORDSHIRE COUNTY ASYLUM at Stafford—Medical Officer for two or three months Salary 3 guineas per week, with furnished apartments, board &c.

ST SAVIOUR'S UNION Surrey—Second Assistant Medical Officer at the Infirmary East Dulwich grove, S E. Salary £30 per annum with furnished apartments, board and washing Subject to statutory deduction—Apply to the Clerk John-street West Blackfriars road, London

TUNBRIDGE WELLS EYE AND EAR HOSPITAL.—Female House Surgeon. Salary £60 per annum, with board and residence

UNIVERSITY COLLEGE, Bristol.—Professorship of Physiology

WALSALL AND DISTRICT HOSPITAL.—Resident House Surgeon Salary £100 per annum and board, lodging, and washing

WEST BROMWICH DISTRICT HOSPITAL.—Resident Assistant House Surgeon. Salary £50 per annum with board, lodging, washing, and attendance.

WEST DERBY UNION—Resident Assistant Medical Officer at Mill-road Infirmary Everton Liverpool for one year Salary £100, with rations subject to statutory deduction.—Apply to the Clerk to the Guardians, Brougham terrace, Liverpool.

WEST-END HOSPITAL FOR NERVOUS DISEASES, Welbeck-street London.—Medical Registrar for six months (non resident) Honorarium, 25 guineas.

WESTMINSTER HOSPITAL, Broad Sanctuary S W—House Surgeon for six months. Board and lodging in the hospital provided.

WEST RIDING ASYLUM Wadsley near Sheffield.—Fifth Assistant Medical Officer Salary £100 per annum, rising £10 a year to £150, with board, &c.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Assistant House Surgeon for six months. Honorarium at the rate of £50 per annum given, and board, lodging, and washing provided.

Births, Marriages, and Deaths.

BIRTHS

FRANCIS.—On June 1st, at Wright-street, Hull the wife of A G Francis, B.A. M B B.S, F R C S., of a daughter

GIBBS.—On June 1st, at Chestnut Lawn Stechford, Birmingham, the wife of T Harold Gibbs M.B B S Dunelm. of a son.

OLIVER.—On May 31st at Westdene, Maidstone, the wife of Charles Pye Oliver, M.D Lond., D.P H. of a son.

MARRIAGES

BLYTH—ARMSTRONG—In Benwell Parish Church, on June 1st, by the Rev Herbert Bott M.A., vicar of St. Aidan's assisted by the Rev A. L. Curry M A., Meredith Wynter Blyth B.A. B.Sc. son of Dr A. Wynter Blyth, Medical Officer of Health, St. Marylebone, London, to Chrissy Mary eldest daughter of Henry E. Armstrong, D Hy Medical Officer of Health, Newcastle-upon Tyne.

BUNCOMBE—BOUSFIELD—On June 1st, at All Saints Fore-gate, by the Rev T F F Williams, M.A. Vicar William Dewey Buncombe Medical Superintendent of City of London Infirmary, Bow road, elder son of the late Charles Hope Buncombe F R.C.S., of Bow and Putney to Henrietta Mary elder daughter of William Jeune Bousfield of Forest-gate, Essex.

COOKE—JONES—On June 6th, at the Welsh Calvinistic Methodist Chapel Garston, by the Rev W O Jones, B A., Ebenezer Hunt Cooke, M.A. M.B of Bhusawal India, son of the Rev J Hunt Cooke of Crouch End to Katie Williams, only daughter of R W Jones, of Garston Liverpool.

DODD—DE SOLOME.—On June 1st, at Holy Trinity Church, Folkestone, Percy Vernon Dodd M.A., M.D of Manor road, Folkestone to Marion Maud, younger daughter of the late Anthony de Solome of Boulogne-sur-Mer

LETHBRIDGE—BELLETT—On June 1st, at St. Mary's, Radipole, Weymouth Sir Alfred Swaine Lethbridge K.C S I M.D late Indian Political Service I M S to Edith Seymour widow of the late George Bellett, M A. Bengal Educational Service.

POLLARD—EUAN-SMITH.—On June 1st at St. Philip's, Kensington George Wilfred Pollard M.D eldest son of George H Pollard, Esq of Grassendale Taunton to Ella Maclaurin second daughter of R. Maclaurin Euan-Smith Esq of Earl's-court-road W

RENDALL—WATSON—On June 1st, at St. Mary Abbot's, Kensington, Percy Rendall M D, of Oxenwood Cheam Surrey to Edith, daughter of Edward Watson, of South Woodford, Essex.

RUCK—PLUMMER.—On June 1st at the Parish Church, Siddington, Gloucestershire David Naunton Ruck, M.R.C S L.R.C P., of Ealing to Elsie Davis second daughter of William Matthew Plummer, of Siddington

WILSON—KEMP—On June 1st at St. Mary's Charlecombe Bath George Wilson, M.D or Warwick to Aileen Ruth eldest daughter of Edward Chippendall Kemp, J P of Dacca, India.

DEATHS

COGHILL.—On June 5th at Ventnor of peritonitis, John George Sinclair Coghill M.D., F R C.P E. M.R.C P Senior Physician of the Royal National Hospital for Consumption Ventnor aged 65 years Scotch and China papers please copy

HINDLE.—On March 5th, at 41, Railway road Darwen, Lancs, George Hindle M.R.C S L.S A Lond aged 49 years.

KERR—On May 30th, at Wellington square Hastings Norman Kerr M.D F S S aged 65 years.

LEY—On June 1st, at the residence of his brother, Longfield road Ealing W Edwin Granville Ley M.D Deputy Surgeon General, late A.M.D

MOIR—On June 7th at St Andrews, N B. Robert Moir M D., F R C S E. Surgeon Major (retired), Indian Medical Service

N B—A fee of 5s is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS

MONDAY (12th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (13th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (14th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

THURSDAY (15th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

FRIDAY (16th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic 10 A.M., Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (17th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES

MONDAY (12th).—RÖNTGEN SOCIETY (11, Chandos-street, Cavendish-square, W.).—7.30 P.M. Council Meeting. 8 P.M. Major Beevor, Mr. J. H. Edwards, and Mr. H. W. Cox: Demonstration of Portable Röntgen Apparatus for Field and Ward Work.—Mr. P. W. W. Baker (for Mr. Gregory): Demonstration of a new Stereoscope.—Dr. Walsh will also show a new Stereoscope.

TUESDAY (13th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Papers:—Dr. L. Rogers: The Results of Segregation of Cases and Movable, from Infected Sites in Eradicating the Assam Epidemic Malarial Fever or Kala-azar.—Dr. J. H. Sequeira: The Remote Prognosis of Pericarditis.

WEDNESDAY (14th).—NORTH-WEST LONDON CLINICAL SOCIETY (North-West London Hospital).—8.30 P.M. Clinical Meeting.

FRIDAY (16th).—WEST LONDON MEDICO-CHIRURGICAL SOCIETY (Town Hall, Hammersmith, W.).—8.30 P.M. Professor W. Osler: Cerebro-Spinal Fever. (Cavendish Lecture.)

SATURDAY (17th).—NEUROLOGICAL SOCIETY OF LONDON (Physiological Laboratory, Cambridge).—4.15 P.M. Paper: Dr. W. H. R. Rivers: Some Physiological Observations on the Natives of Torres Straits. 6.30 P.M. Dinner in Trinity Hall.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (12th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr. W. Wingrave: The Pathology of Middle Ear Disease.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. C. B. Keetley: Injuries and Deformities of the Upper Extremity and Hand.

TUESDAY (13th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Mr. Horsley: Surgery of the Nervous System.

WEDNESDAY (14th).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. S. Martin: Mediastinal Tumours.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr. Eddowes: Drug and Plant Eruptions. (Post-graduate Course.)

THURSDAY (15th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Dr. D. Grant: Diagnosis and Treatment of Discharges from the Ear.

CHARING-CROSS HOSPITAL.—4 P.M. Dr. A. Davidson: Röntgen Ray Demonstration. (Post-Graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Lees: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. C. B. Keetley: Injuries and Deformities of the Upper Extremity and Hand.

LONDON TEMPERANCE HOSPITAL.—2 P.M. Dr. S. Fenwick: Clinical and Pathological Demonstration to Senior Students.

During the week marked copies of the following newspapers have been received: *Hereford Times, Manchester Guardian, Leicester Daily Post, East Anglian Daily Times, Sussex Daily News, Sheffield Daily Telegraph, Lancashire Echo, Western Morning News, Dundee Advertiser, Nottingham Express, Times of India, Pioneer Mail, Brighton Gazette, Southend Chronicle, Yorkshire Post, Pulder, Brixton Mercury, Sanitary Record, Times, City Press, Liverpool Daily Post, Western Daily Press, Leeds Mercury, Labour Leader, Standard, Torquay Times, Record, Medical Journal, Hull Observer, Reading Mercury, Surrey Advertiser, Local Government Chronicle, Public Health, Local Government Journal, Daily Mail, Sussex Daily News, Manchester Courier, Warrington Guardian, Manchester Mercury, Wiltshire Times, Daily Graphic, Evening Herald, Builder, Times of India, Oldham Guardian, Daily Express, Daily Chronicle, Mining Gazette, Public Health, Glasgow Herald, Bristol Gazette, Cornish Telegraph, Lancaster Guardian, &c.*

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed exclusively "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

TO SUBSCRIBERS.

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices.

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SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE. It has come to the knowledge of the Manager that in some cases higher rates are being charged, on the plea that the heavy weight of THE LANCET necessitates additional postage above the ordinary rate allowed for in the terms of subscriptions. Any demand for increased rates, on this or on any other ground, should be resisted. The Proprietors of THE LANCET have for many years paid, and continue to pay, the whole of the heavy cost of postage on overweight foreign issues, and agents are authorised to collect, and do so collect, from the Proprietors the cost of such extra postage.

The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied. Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND.

grown and badly-developed lad 17 years of age, a native of London was sent down here by one of the leading physicians of the Brompton Hospital on Sept. 28th 1897 only as an experiment as the doctor was strongly of opinion that the lad's only chance of recovery was to take the long sea voyage to Australia and stay out there. I found on examination consolidation of the right base of the lung and all the symptoms of commencing phthisis. I thought this a favourable opportunity to try the 'open air' treatment, with extra feeding limited exercise and daily drill to expand the lung &c. Within a fortnight the lad had gained four pounds in weight, night sweats had disappeared, and the lung had greatly recovered its power and breathing space. He steadily improved in every way for six months then returned home, but had a slight relapse. He again came down and remained till the following September when he left with his lung sound and over a stone heavier in weight

I am Sirs yours faithfully

CHARLES A. WIGAN, M D Durh, M R C S Eng

Portishead, Somerset, June 5th 1899

A HARD CASE.

To the Editors of THE LANCET

SIRS,—May I ask the assistance of THE LANCET in the following case? Mr Henry Raven F R.C.S Eng, who has lived and practised in the same parish over 40 years has suddenly been deprived of almost his sole means of support under the following circumstances. About 13 years ago he sold his practice in consideration of an annuity payable to himself and wife during their joint lives and during the life of the survivor This annuity was paid regularly until about two years ago when the purchaser of the practice resold the same to another practitioner on the terms that the vendor should continue to pay the annuity and releasing the practice from the liability to pay the same. The vendor has failed to pay the annuity under circumstances which it is here unnecessary to detail. The annuitants are both in their eighty third year He is bed ridden paralysed, and stone deaf she is blind They have no children either to assist to support them or to look after them. As one of 10 children who in all their infantile maladies received the careful attention of the same kind hearted old practitioner, I am trying to raise a sum which will enable the aged couple to end their days without distress. Subscriptions will be thankfully received and acknowledged by Messrs. Barclay and Co., Bankers, or by

Your obedient servant,

Swaffham, Norfolk June 3rd 1899 A. J WINTER, Solicitor

*** Mr Cadge, F R.C S Eng, of Norwich writes:— I have known Mr Raven for quite 40 years as a worthy and excellent country practitioner I gladly support Mr Winter's appeal and will with pleasure contribute £5 towards the fund which he is collecting"—ED L.

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'ALWAYS HAVE A GOOD COAT ON YOUR BACK"

THESE words were the late Sir Andrew Clark's and came at the end of some very shrewd counsels addressed to a young medical friend just entering on practice Not that Sir Andrew Clark was original in advising a strict attention to wearing apparel on the practitioner's part The advice may in germ be found in Celsus, in the famous passage in which he dwells on the advantage of making a cheerful impression on the patient He attaches much importance to the hilaris vultus (good humoured countenance) of the medical man and by implication puts his veto on any outward appurtenance (dress included) which the patient might find distasteful or repellent. The opposite extrême—dandyism—he would have found objectionable for the same reason So-and so was so well dressed that everybody looked at him, was once said to Beau Brummel "Then he was not well dressed' was Brummel's rejoinder The truth is that excess either way slovenliness on the one hand or a 'petit-maître" fastidiousness on the other argues a defect of judgment not reassuring to the patient often full of morbid fancies or misgivings and seldom in a mood to be charitable. The mediæval school of Salerno is even more explicit on medical demeanour and apparel than the Roman Hippocrates. In addition to the "kindly look" it counsels the 'good coat' and does not object to the "handsome ring on the finger as evidence of means or of some patient's gratitude.

'Clemens accedat medicus cum veste polita
Luceat in digitis splendida gemma suis."

(Let the physician approach, bland of demeanour and in dress à la *mode* let a brilliant of pure water sparkle on his fingers.) Nor according to the same authority ought his means of locomotion to be out of keeping with his dress —

Si fieri valeat, quadrupes sibi sit pretiosus
Ejus et ornatus splendidus atque decens."

(If possible let him have a horse of value and let its equipment be bright and in good taste.) Besides impressing his *clientèle* favourably it will be his endeavour to win its goodwill —

'Ornatu nitido consbere carior esse."

(With a handsome turn-out you will try to be better liked—if indeed 'carior' does not admit of another rendering in the sense of gaining higher fees.) This latter interpretation seems implied in the second line of the distich:—

Splendidus ornatus plurima dona dabit."

(A magnificent turn-out will yield the largest *honoraria*.) The sad effects of a disregard of 'externals" are given in another distich—

'Viliter indutus munus sibi vile parabit
Nam pauper medicus villa dona capit

(Shabbily dressed the practitioner will earn for himself a shabby fee, for if poor his receipts are correspondingly so.) These 'wise saws of the Salernitan school point to the fact that its *alumni* were more than the monastic practitioners who attended the sick or disabled as part of their religious duties. They included the fashionable or the court physician practising in high places. It was, indeed, for a Norman king that, in the first instance, Salerno compiled its medical rules.

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H KINGSLEY HUNTER, L.S A.'

To the Editors of THE LANCET

SIRS —I beg to announce the receipt of the undermentioned donations to this fund, making a total of £72 7s 3d.

I am, Sirs, yours faithfully,

RIVERS WILLSON, Treasurer

42, Wellington-square, Oxford, June 6th, 1899.

	£	s.	d.		£	s.	d.
Dr J B. Ball	1	1	0	Mr Henry Stear ...	1	1	0
Dr E. J Nix ..	2	2	0	Dr Francis T Bond	0	5	0
Mr E. Creighton	1	1	0	Mr Leonard A. Bidwell ...	1	1	0
A. A.	0	10	6	Dr R Petch	1	1	0
Mr Percy Sharp	0	10	6	Mr Walter H. Dodd ...	1	1	0

Dalta Sahib—We do not see that there will be any benefit to the profession at large gained by the publication of the correspondence in question It is unfortunate that Dr R resented our correspondent's action through a misapprehension. It is also unfortunate that our correspondent was not informed of the facts contained in Dr R's second letter The matter seems to us to be one which both gentlemen should at once agree to forget.

H K—Our supplements at different times have touched upon the growth of hospitals but there is no one supplement which gives the whole story nor do we know any book that contains it. The big London and provincial hospitals have all at one time or another we believe, issued pamphlets containing their histories. For the ancient history of London hospitals our correspondent may consult Strype's Stow's Survey of London and other recognised authorities.

P D S—No such book has been written. The introductory and valedictory addresses of the presidents of various learned societies, ophthalmological obstetrical &c. often take the form of a review of progress along certain lines. The Annus Medicus of THE LANCET gives a *résumé* of medical and surgical developments during each past year

E H P—The waters of Levico (Tyrol) are both arsenical and ferruginous and of good repute. There are no arsenical waters known to us in England. The medical man who recommended the treatment perhaps knows of a water the properties of which accord with his suggestion.

M R.C P—The address of the Tallerman Institute is 59 Welbeck street. The question concerning fees had better be addressed to the secretary

METEOROLOGICAL READINGS

(Taken daily at 8 30 a.m. by Steward's Instruments.)

THE LANCET Office, June 8th, 1899.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rain fall.	Solar Radiation in Vacuo.	Maximum Temp. Shade	Min. Temp	Wet Bulb.	Dry Bulb.	8.30 a.m.
June 2	30·07	S		126	86	61	62	72	Fine
,, 3	30 19	S E.	..	100	82	54	54	61	Fine
,, 4	30·23	S W	..	111	81	55	60	63	Fine
,, 5	30 24	S W		123	87	60	60	70	Fine
,, 6	30 25	S E	...	107	83	63	63	70	Hazy
,, 7	30 29	S E.		110	78	60	60	67	Hazy
,, 8	30 41	E.		110	60	52	50	54	Cloudy

The Baillie Lectures

ON

FRAGMENTS OF PATHOLOGY AND THERAPEUTICS.

Delivered at St George's Hospital on May 11th, 18th, and 25th 1899.

BY W HOWSHIP DICKINSON, M D CANTAB., F R C P LOND,

CONSULTING PHYSICIAN TO ST GEORGE'S HOSPITAL AND TO THE HOSPITAL FOR SICK CHILDREN GREAT ORMOND STREET
HONORARY FELLOW OF GONVILLE AND CAIUS COLLEGE
CORRESPONDING MEMBER OF THE ACADEMY OF MEDICINE OF NEW YORK

LECTURE II [1]

Delivered on May 18th 1899

SOME REMARKS CONCERNING DIET

GENTLEMEN,—Water forms the larger part of the human body, it constitutes three-fourths of the solid textures and four fifths of the blood It is the indispensable vehicle of all the secretions and of all the materials which are introduced as food We can get on better without meat than without drink The want of the solids is mere deprivation, the want of the liquid is deprivation and something more for the lack of water hinders the escape of what the water should carry off with it and the body becomes poisoned by its own products But it is not my purpose to de cant at large upon the physiology of water but only to touch upon one or two points of medical interest in relation to its action Water is the universal solvent and the vehicle which carries out of the body all the soluble excreta and products of disease When urea and the allied uræmic poisons accumulate in the body as the results of renal disease water is the surest of eliminants It cannot leave the body as urine without taking with it more or less of these accumulations I have satisfied myself that the amount of urea excreted in renal disease is increased by the drinking of water in proportion to the amount of diuresis occasioned In some forms of chronic and permanent disease of the kidney particularly of the granular kind the urine is poor in quality but excessive in amount, the patient is habitually athirst and drinks abundantly of watery liquids This is his salvation If he is so ill advised as to greatly reduce his drink the urine, too, will diminish and uræmia may declare itself by dangerous or fatal consequences *Mutatis mutandis*, similar rules apply to diabetes Water washes out the sugar and the special toxic material, be it acetone or only something resembling acetone, which the diabetic process engenders, and helps to keep the system clear of the poison Conversely the stinting of water adds to the danger of the disease Large drinking of water may stave off for a time diabetic coma and the same deadly condition may be suspended by the copious introduction of an aqueous solution into the veins I have seen consciousness completely though temporarily, restored in this condition by this process I once had the almost incredible amount of 456 ounces (more than 22 imperial pints) thus injected in two operations within the space of 32 hours [2] The patient before the first was in a state of coma resembling profound sleep, from which she could be roused for a moment, but not so as to answer intelligently, at once relapsing into insensibility After the injection of 106 ounces she recovered complete consciousness but only retained it for 25 minutes After the subsequent injection of 350 ounces she recovered consciousness, though not immediately, and retained it for about eight hours It was observed that the urine passed after the operation no longer gave the acetone reaction which before was strongly declared So much for water as a diabetic depurative.

Gout is another disorder in which it is probable that the essential poison, be it what it may, finds an exit with the urine, and it is consistent both with reasoning and experience that this outgoing should be facilitated by water-drinking and diuresis

> 'Spare diet and plenty of spring water clear Physicians hold are good,
> Who lives thus meet never fear a fever in the blood

It may be said in humble prose that Nature's remedies for gout are air, exercise, and water Water however is valuable, is inexpensive Our own happy island has it in never failing abundance Not only of Skiddaw among our native hills can it be said—

> "The sylvan roads
> His front among Atlantic clouds lifts
> And pours forth streams more sweet than Castaly

Water can be obtained in perfection without going to Germany for it I hold with Naaman the Syrian in his preference for the waters of his own land 'Are not Abana and Pharpar, rivers of Damascus, better than all the waters of Israel?' The chief and often the only benefit which is derived from foreign or distant springs (I speak of the waters *per se*, not of the collateral advantages of German bands, or golf, as the case may be) is imparted by the water, using the term chemically, rather than by the various minerals which the accidents of geology rather than any therapeutical purpose have caused to be mingled with it These admixtures may do good or may do harm, according to the state of the patient and the judgment of the medical adviser, but the *water* is generally of service, and it may often be a point of wisdom to drink this in its purity rather than sophisticated whether by nature or art

Next to the effects of drinking much water something may be said as to the results of drinking little There are many conditions of disease in which the body becomes water logged, loaded with the products of dropsy which whatever else they may contain, consist chiefly of water If there is too much water in the tissues or serous cavities and all this comes, directly or indirectly, from what is swallowed a very obvious suggestion is the cutting off of the supply Some cavities in some conditions, notably the peritoneum in hepatic ascites, hold their contents so tenaciously that it is seldom that any impression can be made upon them by dry diet A remarkable exception was afforded by the case of a boy, seven years of age [3] who was under my care in St George's Hospital He had hypertrophic cirrhosis, presumably produced by alcohol, and ascites nearly to bursting He was tapped 10 times in the course of 55 days with the total removal of 958 ounces, or over 47 imperial pints The hopelessness and the inevitable end of this continued tapping suggested treatment by dehydration The drink was limited, at its minimum to six ounces of water, a few small pieces of ice, and one and a half ounces of brandy in the 24 hours This was completely successful The cure of the dropsy was immediate, complete, and final He left the hospital without a trace At his death two years afterwards from an abscess of the brain the peritoneal cavity was found to have been obliterated by delicate adhesions The liver was markedly cirrhotic I have tried the same plan in other cases of hepatic ascites, chiefly in adults with but limited success Renal dropsy may be more amenable than hepatic but cannot be subjected without risk to a method of treatment which invites uræmia. Cardiac dropsy may be thus treated without danger and often with much advantage, whether the accumulation be in the cellular tissue or in the serous cavities I have even come across one instance in which a large diminution in the bulk of a great ovarian cyst occurred as the result of a course of dietetic dehydration I presume, however that in these days of safe ovariotomy the surgical method of dealing with these cysts will be preferred to all others Limitation of drink in some forms of dropsy is remarkably well borne, the patient probably utilises his own accumulations and feeds upon himself I have reduced the daily drink to minima varying from 16 ounces to two ounces in the 24 hours Patients complain but little of thirst, and the tongue has usually remained moist When it became dry, which was seldom the regimen was always discontinued or relaxed One of the results of the restriction of fluid is loss of flesh This is no doubt due to the failure of saliva and of appetite and inability to take the habitual amount of food There is a common belief that water is fattening This taken strictly is nothing less than an absurdity You cannot feed capons so Water cannot give what it does not contain If cattle could be made fat on water farming would be a more

[1] Lecture I was published in THE LANCET of June 10th, 1899

[2] Transactions of the Clinical Society of London vol xxiii p 150

[3] This case is recorded in Allbutt's System of Medicine vol v p 691

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A.—Mr E. G Annis Huddersfield, Allône Manufacturing Co, Lond. Ayr District Asylum Medical Assistant of; Messrs R. Anderson and Co, Lond. Messrs. Armour and Co., Lond. Messrs. Attinger Frères, Neuchatel Atlanta (U S.A.) Society of Medicine, Secretary of Mr Jasper Anderson, Blackpool

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The Baillie Lectures

ON

FRAGMENTS OF PATHOLOGY AND THERAPEUTICS.

Delivered at St George's Hospital on May 11th, 18th, and 25th 1899

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LECTURE II [1]

Delivered on May 11th, 1899

SOME REMARKS CONCERNING DIET

GENTLEMEN —Water forms the larger part of the human body, it constitutes three-fourths of the solid textures and four fifths of the blood It is the indispensable vehicle of all the secretions and of all the materials which are introduced as food We can get on better without meat than without drink The want of the solids is more deprivation, the want of the liquid is deprivation and something more for the lack of water hinders the escape of what the water should carry off with it and the body becomes poisoned by its own products But it is not my purpose to descant at large upon the physiology of water but only to touch upon one or two points of medical interest in relation to its action Water is the universal solvent and the vehicle which carries out of the body all the soluble excreta and products of disease When urea and the allied uremic poisons accumulate in the body as the results of renal disease water is the surest of eliminants It cannot leave the body as urine without taking with it more or less of these accumulations I have satisfied myself that the amount of urea excreted in renal disease is increased by the drinking of water in proportion to the amount of diuresis occasioned In some forms of chronic and permanent disease of the kidney, particularly of the granular kind, the urine is poor in quality but excessive in amount, the patient is habitually athirst and drinks abundantly of watery liquids This is his salvation If he is so ill advised as to greatly reduce his drink the urine, too, will diminish and uræmia may declare itself by dangerous or fatal consequences *Mutatis mutandis*, similar rules apply to diabetes Water washes out the sugar and the special toxic material, be it acetone or only something resembling acetone, which the diabetic process engenders and helps to keep the system clear of the poison Conversely the stinting of water adds to the danger of the disease Large drinking of water may stave off for a time diabetic coma and the same deadly condition may be suspended by the copious introduction of an aqueous solution into the veins I have seen consciousness completely though temporarily, restored in this condition by this process I once had the almost incredible amount of 456 ounces (more than 22 imperial pints) thus injected in two operations within the space of 32 hours [2] The patient before the first was in a state of coma resembling profound sleep, from which she could be roused for a moment, but not so as to answer intelligently, at once relapsing into insensibility After the injection of 106 ounces she recovered complete consciousness but only retained it for 25 minutes After the subsequent injection of 350 ounces she recovered consciousness, though not immediately, and retained it for about eight hours It was observed that the urine passed after the operation no longer gave the acetone reaction which before was strongly declared So much for water as a diabetic depurative.

Gout is another disorder in which it is probable that the essential poison, be it what it may finds an exit with the urine, and it is consistent both with reasoning and experience that this outgoing should be facilitated by water drinking and diuresis

> "Spare diet and plenty water clear physicians hold are good
> Who diets thus most never fear a fever in the blood"

It may be said in humble prose that Nature's remedies for gout are air, exercise, and water Water however in valuable, is inexpensive Our own happy island has it in never failing abundance Not only of Skiddaw among our native hills can it be said —

> he sees rous is
> His front among Atlantic clouds
> And pours forth streams more sweet than Castaly

Water can be obtained in perfection without going to Germany for it I hold with Naaman the Syrian in his preference for the waters of his own land "Are not Abana and Pharpar, rivers of Damascus, better than all the waters of Israel?" The chief and often the only benefit which is derived from foreign or distant springs (I speak of the waters *per se*, not of the collateral advantages of German bands, or golf as the case may be) is imparted by the water, using the term chemically, rather than by the various minerals which the accidents of geology rather than any therapeutical purpose have caused to be mingled with it These admixtures may do good or may do harm according to the state of the patient and the judgment of the medical adviser, but the *water* is generally of service, and it may often be a point of wisdom to drink this in its purity rather than sophisticated whether by nature or art

Next to the effects of drinking much water something may be said as to the results of drinking little There are many conditions of disease in which the body becomes water logged, loaded with the products of dropsy which whatever else they may contain consist chiefly of water If there is too much water in the tissues or serous cavities and all this comes, directly or indirectly, from what is swallowed a very obvious suggestion is the cutting off of the supply Some cavities in some conditions, notably the peritoneum in hepatic ascites hold their contents so tenaciously that it is seldom that any impression can be made upon them by dry diet A remarkable exception was afforded by the case of a boy, seven years of age [3] who was under my care in St George's Hospital He had hypertrophic cirrhosis, presumably produced by alcohol, and ascites nearly to bursting He was tapped 10 times in the course of 55 days with the total removal of 953 ounces, or over 47 imperial pints The hopelessness and the inevitable end of this continued tapping suggested treatment by dehydration The drink was limited, at its minimum to six ounces of water, a few small pieces of ice and one and a half ounces of brandy in the 24 hours This was completely successful The cure of the dropsy was immediate, complete, and final He left the hospital without a trace At his death two years afterwards from an abscess of the brain the peritoneal cavity was found to have been obliterated by delicate adhesions The liver was markedly cirrhotic I have tried the same plan in other cases of hepatic ascites, chiefly in adults, with but limited success Renal dropsy may be more amenable than hepatic but cannot be subjected without risk to a method of treatment which invites uræmia Cardiac dropsy may be thus treated without danger and often with much advantage whether the accumulation be in the cellular tissue or in the serous cavities I have even come across one instance in which a large diminution in the bulk of a great ovarian cyst occurred as the result of a course of dietetic dehydration I presume, however that in these days of safe ovariotomy the surgical method of dealing with these cysts will be preferred to all others Limitation of drink in some forms of dropsy is remarkably well borne, the patient probably utilises his own accumulations and feeds upon himself I have reduced the daily drink to minima varying from 16 ounces to two ounces in the 24 hours Patients complain but little of thirst, and the tongue has usually remained moist When it became dry, which was seldom the regimen was always discontinued or relaxed One of the results of the restriction of fluid is loss of flesh This is no doubt due to the failure of saliva and of appetite and inability to take the habitual amount of food There is a common belief that water is fattening This taken strictly is nothing less than an absurdity You cannot feed capons so Water cannot give what it does not contain If cattle could be made fat on water farming would be a more

[1] Lecture I. was published in THE LANCET of June 10th, 899

[2] Transactions of the Clinical Society of London vol xxiii p 150

[3] This case is recorded in Allbutt's System of Medicine vol v, p 691

lucrative occupation than at present it seems to be But though water is not fattening the want of it is thinning, for the drought interferes with the appetite and with the solution and assimilation of food But let not the corpulent too readily resort to a dry diet as a means of reducing their bulk To limit the water is to limit irrigation and excretion and to favour the accumulation of waste products such as tend to produce gout and other disorders Treatment by dehydration must therefore be cautiously exercised and never long continued

ON CONCENTRATED FOODS

I might make a short chapter like that "Concerning Snakes in Iceland" and say that there are no such things For "human nature's daily food" are required certain weights of nitrogen, carbon, oxygen, and hydrogen which are ultimate forms of matter and not capable of concentration or further reduction to essential principles An ox cannot be got into a teacup by any other process than by leaving the greater part of the animal outside The stomach of the average man demands every 24 hours 21 grammes of nitrogen, or about three quarters of an ounce, 307 grammes of carbon, or about 11 ounces, 12 grammes of hydrogen, not quite half an ounce, besides sulphur and salts This is required to make up for the waste—to restore what leaves his body in various shapes Three quarters of a pound of carbon cannot be got into less than three quarters of a pound The nutritive effect cannot be separated from the bulk The man must have his pound of flesh He has to find fuel and to replace waste—charcoal to burn and nitrogen for repairs If he does not get the necessary poundage he will dwindle, peak, and pine His account of profit and loss must be adjusted according to weight A drachm of Liebig's extract cannot supply more than a drachm Quality cannot supply the place of quantity The chief nourishers of life's feast are not creatin and creatinin but albumin, myosin, fat, gluten, starch, and sugar None of these are capable of being administered otherwise than in their natural bodies and corporeal bulk A sick person who is presented with Valentine's food in teaspoonfuls when he should have milk in pints has as much right to complain as I should have if I were to ask for a steak in the luncheon room and be put off with a minute quantity of Liebig out of the shop I might object that whatever the virtues of the Liebig it was not filling at the price But we cannot reckon concentrated extracts as entirely useless, though they are not, properly speaking, food They contain little or no albumin, some little, some none, no fat, and of the vegetable carbohydrates none They contain salts and extractives which may be accessories to food but are not food itself Perhaps they may be regarded as complementary or supplementary to the essentials of food and may in special circumstances have special use I have long been in the habit of using them to help to make up for the loss by suppuration and so prevent or retard the consequent lardacity So far as pus carries off the salts meat extracts cannot fail to supply the means of replacing them These extras are, of course, only to be employed as superadditions to a diet abundant in other respects, not as substitutes for any part of it They cannot take the place of nutriment in bulk Beside their power of supplying salts and extractives which under special circumstances may be wanting it is supposed that they have some stimulant action But the utility of concentrated foods has been greatly exaggerated in practice, they are additions to the essential diet, not substitutes for it It is possible that a pennyworth of milk may be worth more to the patient than a shillingsworth of Liebig's extract

DIET IN TYPHOID FEVER AND THE TYPHOID STATE

To take the general condition first let me say what I mean by the "typhoid state" I mean the advanced condition of prostration, with a dry tongue, a rapid and failing pulse, and usually a high temperature This is found in a typical state in the later stages of enteric fever, but also in typhus fever, pneumonia, and pyæmia, and often towards the close of phthisis and of many diseases, especially if they be accompanied with fever, which tend to death by exhaustion and cardiac failure In these conditions, with a morbidly high and failing powers of vitality, we have increased tissue at which the high temperature is at and diminished ability to more food is wanted less is capable of being taken For these two reasons the body wastes, much is taken out of it, and little is put in It is so common for us to see these subjects of fever and prostration fed only upon liquids that it may not occur to us to question why they are thus restricted They want more food than in health, for they are rapidly losing weight—why put them off with less? The dry tongue answers the question The tongue is dry because no saliva is secreted I long ago ascertained this by catheterising the salivary ducts While in ordinary conditions the saliva would drip freely from the cannula with a dry tongue none could be obtained Under advanced fever and extreme prostration the saliva fails to be secreted and the tongue becomes dry and encrusted There is much reason to believe that what happens to the salivary glands happens also to other glandular structures concerned in digestion, especially those which produce the gastric juice. If this be so a dry tongue may be taken as a sign of loss of digestive power with which goes loss of appetite Nature revolts against solids, nor could the stomach deal with them could they be swallowed What has to be done under such circumstances is to give only liquids or food in solution, which is practically food upon which one part of the digestive process, and that probably the most difficult part, has been accomplished Dissolved food can be absorbed and utilised with a minimum of digestive effort If the stomach retains never so little of its function it may suffice to peptonise and adapt for absorption the food which is already dissolved Perhaps much of it may be taken up by the vessels almost unaltered This is the roundabout reason for what has long been taught by experience that when the tongue is dry the patient must live by suction

Now let us consider for a moment of what the liquid food should consist Milk is complete nutriment, it contains all the essentials The casein supplies the nitrogenous part, the fat and sugar the carbon Milk should always be given under such conditions as I am considering Eggs, again, in their totality, yelks and whites together, may be regarded as complete nutriment Out of one the entire animal is constructed—bone and fibre, muscle, fat, and nerve Eggs in their entirety can sometimes be given beaten up with milk or otherwise, but the whole egg is less constantly available than the yelk with certain additions The white is coagulated by alcohol and therefore cannot form part of the smooth, palatable, and digestible compound known to druggists as "mistura spiritus vini Gallici" and to the public as "egg flip" This, as I shall presently show, is especially useful as complementary to beef tea since it contains exactly what beef tea wants But I will put the "mistura" on the shelf for a moment while I say a word about beef tea

Beef tea takes the next place to milk in the accepted dietary of the typhoid state It is wholly of the nitrogenous class though not wholly or chiefly consisting of nitrogen It contains the animal extracts of which Liebig's extract may be taken as the type It contains, or ought to contain, gelatin abundantly, it contains no albumin in a liquid form, but should have a fine sediment into the composition of which coagulated albumin enters It contains no fat or only a trace Thus, beef tea, though greatly superior to the concentrated extracts, is wanting in carbonaceous materials It yields only as much of them as can be obtained by the breaking up of the nitrogenous compounds It is worth while to consider for a moment how much carbon or carbohydrate can be got in this way A good deal but not enough Whether we take the proteid bodies as represented by albumin, or gelatin which largely enters into beef tea, both these nitrogenous bodies contain carbon in a much larger amount than nitrogen Albumin contains 53 per cent of carbon and 15 per cent of nitrogen, gelatin contain 50 per cent of carbon and 18 per cent of nitrogen We may put it roughly that the most nitrogenous components of our food contain three times as much carbon as nitrogen The amount of carbohydrate which is wrapped up in albumin is manifested in diabetes when sugar is abundantly made out of a diet which consists as strictly as possible of foods of the nitrogenous class In such a case the albumin is broken in two, one fragment being sugar the other urea I mention this to illustrate the fact that nitrogenous food necessarily includes much of the carbonaceous But it does not include enough, for the maintenance of the body 14 times as much carbon is required as of nitrogen To take albumin as the type of nitrogenous food this contains scarcely four times as much carbon as

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nitrogen Thus a nitrogenous liquid, though it may supply some of the essential carbon does not contain it in the needed proportion Beef tea therefore may comprise a part of the necessary diet, but is wanting in the class of food which should form its greatest bulk The addition of bread, when admissible helps to supply the deficiency by reason of the starch which it contains But where it is necessary to keep strictly to liquids sugar is obviously indicated Sugar is perfectly soluble, is easily absorbed and assimilated, and exactly supplies what beef tea is wanting in I have long made a habit of putting sugar into beef tea and have often taken advantage of other liquids as vehicles for this carbohydrate This is only what cooks do when they put sugar into soup Be it remembered that the daily waste of carbon is 14 times as great as that of nitrogen and it is self evident that the supply should be adjusted in some such proportion On the same principle arrowroot, which consists almost purely of starch and is a convenient vehicle for sugar, is a valuable ally in the fight against exhaustion which has to be waged in the "typhoid state" Lastly, in extreme conditions it is advisable to peptonise the milk and beef tea In all but extreme conditions it is probable that though the stomach cannot furnish enough gastric juice to digest solids, yet it is able to do the little that is required to accomplish the digestion of liquids In most states, therefore, the stomach may be left to do its own work in this respect But when it is obvious that the powers of digestion and assimilation are giving way then the *expedient of artificial digestion may be resorted to*

Passing now from the typhoid state in general to typhoid fever in particular little remains to be added The ulceration of the bowels and the tendency of particles to lodge in and exaggerate the ulcers makes it essential that the liquidity of the food should be fully maintained, while the failure of nutrition makes it imperative that the liquid should be complete in all the elements of food I would reiterate and enforce the addition of sugar and starch to the dietary when, as is customary, this is largely comprised of beef tea. The starch is best given as arrowroot which when properly made is practically liquid Another important means of completing the diet in typhoid fever and the typhoid state is the egg and-brandy mixture to which I have already adverted This is made of the yelk only and so maintains a liquidity and smoothness which it would not have were the white included together with the brandy The yelk of egg contains (beside a certain amount of nitrogenous matter) at least 30 per cent of fat, and the fat is so disposed that it readily emulsifies and presents itself to the stomach in a form which is readily taken up even in advanced phases of gastric failure The sugar in this mixture also counts for something I am satisfied that in conditions where life is threatened by failure of nutrition these additions of sugar, starch, and fat to a dietary which is often too simply nitrogenous are of vital importance

DIET IN INTESTINAL OBSTRUCTION

I may touch upon another variety of disease in which a peculiar diet may be employed with advantage I refer to chronic obstruction of the bowel, impassable and irremediable Much of the distress of this condition, the abdominal distension and the stercoraceous vomiting, depend upon the accumulation of faces in the intestines and the necessity of getting rid of the collection upwards instead of downwards If there were no fæces, if the food could be wholly absorbed and leave no residuum, the sufferings of the patient would be greatly mitigated and he might live long in comparative ease without the necessity of alvine evacuation Fæces mainly consist of the undissolved and unabsorbed residuum of food A small portion is contributed by a special secretion from the intestinal glands, but this is little in bulk, however obtrusive in quality The great mass of fæces is unconvertible and discarded food The problem is to reduce this to a minimum—to give food, and of that a sufficiency, of such a sort that it leaves no solid remnant in the bowel Now let us consider how that can be done In the first place, all solids must be interdicted and only liquids given Every kind of solid food, excepting such as, like sugar, are capable of complete solution, contributes to fæces by its insoluble residuum—vegetable food copiously, animal food in less bulk Of liquids only those should be given which cannot coagulate or solidify within the alimentary canal and which carry no solid particles in suspension Milk as such is obviously not admissible, for it abounds in casein which coagulates within the body and, as a matter of experience, gives rise to bulky excrement But the whey—milk from which the casein has been removed—is open to no such objection It contains nothing that can become solid in the bowel and presumably is capable of being absorbed in its entirety It contains the fat, the sugar, and the salts—the fat as a fine emulsion and the sugar and the salts in complete solution All are important to nutrition and presumably admit of complete absorption Whey, then may be given without stint Coming next to beef tea this in its ordinary state contains much solid matter in the shape of the well known brown sediment This must be completely removed which can easily be done either by passing the liquid through filtering paper or by letting it stand for some hours in a tall vessel and pouring off for use only the clear superstratum The clear fluid obtained by one of these methods contains nothing that could under any circumstances solidify within the bowel It contains nourishment as gelatin and the soluble extracts of meat Sugar may be added or may be given otherwise, this is wholly soluble and, as I have already shown, is of especial value Much the same may be said of starch, which in the form of arrowroot is probably capable of complete solution Alcohol, as permanently liquid, is unobjectionable, and it may be added that it is generally desirable as a means of adding to a diet which is not too varied or satisfying Any clear alcoholic drink may be employed, whether beer, wine, or spirit The last is a convenient vehicle for sugar Malt liquor of the *higher quality contains in solution a considerable quantity of* gluten which cannot fail to contribute usefully to the *meal* I have had considerable experience of this dietary in cases of impassable obstruction, mostly, or I think I may say entirely, from malignant disease, and can testify to the relief it gives The stercoraceous vomiting ceases for a time the abdomen becomes less distended, and a condition of comfort results which, though only temporary, is worth securing After a time the vomiting returns and the case progresses to the inevitable end But that end is postponed, which is all that is possible under the circumstances

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LECTURE III

Delivered on May 25th, 1899

ON THE SUPERFICIAL TREATMENT OF DEEP DISEASE

GENTLEMEN,—As long ago as in the year 1868[3] I ventured to call in question the then general practice of regarding most organic diseases as accessible from the surface and applying agents commonly of an irritating quality to the skin which lay over the organ supposed to be affected though more often than not it had no direct connexion with it The paper to which I refer led to an animated discussion and was followed by considerable modification in St George's Hospital at least, of the practices which had been impugned These practices were mostly survivals of the old humoral pathology, a system which had enough truth in it to shelter a great deal of error With this system was a vague notion, which, if never exactly formulated, was certainly acted on, that each disease had its essence or separate entity which could move at its own sweet will from place to place and could be induced by the attraction of a blister or the more overpowering solicitation of the actual cautery, to quit a vital organ and fix upon a comparatively unimportant surface One condition, however, appeared to be necessary the inviting skin must be as near as possible to the suffering organ measured across country rather than by the circuitous routes of vessels and nerves. Much of this still survives, practices long outlive the theories on which they were based It is still by no means unknown for leeches or cupping glasses to be applied to surfaces which have no *vascular connexion* with the organ it is desired to influence excepting round by the heart, and for the superjacent skin to be punished for the errors of viscera which are structurally unconnected with it I speak of the deep seated disorders which come under the care of the physician Superficial disturbances may call for superficial treatment Local inflammations of skin and cellular tissue may be beneficially treated by superficial applications, but the case is far otherwise when we have to deal with the lung, the liver, or the kidney Because surgeons found a suppurative condition under the skin to be benefited by poulticing physicians used to apply relays of

[3] Counter Irritation St. George's Hospital Reports vol iii reprinted in Occasional Papers on Medical Subjects, 1890

poultices to the chest over a pneumonic lung and valued themselves in being up to date and rather enlightened than not The practice, as I have had occasional opportunity of observing, still lingers in remote places Let us consider what a poultice is It is something wet and warm which makes the surface to which it is applied sodden and soft and facilitates the efforts of the pus corpuscles to break through the walls of their prison house In dealing with a subcutaneous focus of inflammation this may do good But how about the lung? The wet cannot reach it, the linseed cannot project its salutary moisture across the pleural cavity The warmth, if warmth be wanted, can be more conveniently applied Whatever sense there may be in keeping the chest warm by means of coverings which are light, dry, and not such as to require frequent change, I can discern only the want of sense in embarrassing the patient with sloppy nuisances which interfere with his comfort, exhaust him by frequent lifting and changing and the special effect of which cannot possibly reach the organ they are designed to benefit For my part I always recommend a light jacket of cotton wool as the best application to the chest in pneumonia—not that this does more good than any other light and warm clothing, but that it gives satisfaction as something special to the disease and keeps off things that might be more open to objection. No doubt practitioners of medicine have been led to the misuse of poultices by an analogy the fallacy of which is obvious A poultice does good to a superficial abscess therefore it is good for inflammation in general and cannot fail to benefit a hepatised lung or a region of bronchitis

Local bleeding often affords another instance of the want of thought with which local remedies are aimed at disorders inaccessible to them The hypochondrium has been leeched to deplete the liver, the chest leeched or cupped to deplete the lung, the scalp or the nape of the neck leeched or cupped to drain the brain, the loins cupped to influence the kidney, and the scrotum leeched to relieve the testicle What can be more unreasonable when one comes to think of it than leech g the hypochondrium to deplete the liver seeing that here is no direct vascular connexion between the two? There is no communication between the superficial vessels of the hypochondrium and the vessels of the organ beneath excepting what is trifling and roundabout. It is easy at a post mortem examination to place the hand between the wall of the abdomen and the front of the liver and realise by touch the extent of the separation between them The hepatic artery and the portal vein which supply the liver may be regarded as practically independent of the vessels of the abdominal wall Similarly with regard to the testicle the scrotum derives its blood from the femoral and iliac arteries, the testicle from the aorta With regard to some of these practices there is enough excuse to found an argument upon in a debating society, but with none is there enough to demonstrate their utility It is true that certain minute vessels make a connexion between the capsule of the kidney and the lumbar structures but it is equally true that so overwhelming a proportion of the renal blood is drawn by the renal artery directly from the aorta, that any attempt to lessen this supply by drawing upon the circulation of the skin would be about as rational as trying to lower the water at London Bridge by taking some out of the Serpentine Similar reasoning may apply to the brain and the scalp There are some communications, but scarcely enough to warrant the attempt to relieve the one by way of the other Yet how often have we seen the temples leeched at the expense of the external carotid when the territory of the internal carotid is in question If we wish to deplete the lung, the liver, or the brain it must be by way of the general circulation whether by venesection or otherwise Superficial measures are suited to superficial disorders Their obvious utility in such circumstances has done much to magnify their efficacy and to promote their employment where they can but be useless In regard to serous cavities and joints these have their outer walls for the most part, connected by numerous anastomoses with the covering skin The outer layers of pleura and pericardium and the capsules of the knee and other joints can be depleted from without to their frequent advantage, but not so can the deeper and unconnected structures be influenced The relief in leeching the chest for pleurisy or pericarditis is often obvious, equally so is the withdrawal of serum by vesication from a rheumatic joint But there must be a community of circulation between the surface operated on and the structure aimed at But far beyond local blood letting the great abuse and opprobrium of superficial therapeutics has been what is called "counter irritation" We know of "irritation," a thing to be generally avoided, but is there such a thing as "*counter* irritation"? Can we do good to one part by doing harm to another? Can we fetch out the virus of a deep disease by opposing to it superficial attractions? The old counter irritators either did not know their anatomy or did not regard it, between the skin and the lung is a great gulf fixed, nor is the base of the brain within obvious reach of the nape of the neck

It is not my purpose now to deal at length with a subject which I have more fully discussed elsewhere, but I may briefly advert to some of the practices which are more honoured in the breach than the observance The actual cautery to the epigastrium for ulcer of the stomach is one of them I have been told by a physician who witnessed it in bygone days and in a foreign country that one mode of treating cholera was to apply suddenly to the abdomen an instrument like a spade which had just been immersed in scalding water If the patient yelled the restoration of his voice was regarded as of good omen I remember the time when a person with a cerebral lesion, whether meningitis apoplexy, or tumour, was almost sure to be blistered on the nape of the neck and was exposed to the chance of having the sore kept open by means of savine ointment One physician, by way of being in advance of his time, treated diabetes in this way, for, thought he, diabetes is a disease of the medulla oblongata and the nearest skin is that of the neck It will be observed that in the theory which inspired this treatment of cerebral disease, or disease supposed to be cerebral, there is no consideration of the course of vessels or nerves or of the interposition of cavities The vulgar belief in external applications is displayed in the popularity of many nostrums In old days there was St John Long's liniment as a cure for phthisis, an abominable mixture of turpentine and acetic acid which we could wish had been freely applied to the quack who invented it More recently orthodox practitioners have put irritants to the chest for tubercle of the lung I remember being taken about 40 years ago by an eminent and honoured surgeon to see a case of phthisis We made a division of labour I localised the tubercle in the apices, and he with the most conscientious care cut two blisters exactly to fit the lesions I stood by consenting We acted according to our lights I suppose we had a vague notion of drawing something out or setting up a superficial disorder which should compete with and detract from the deeper But now the bacillus has to be reckoned with Neither can this make its way out by the surface nor can its multiplication in the lung be supposed to be affected by anything we can do to the skin Similar criticisms apply to the painting of the surface with iodine, which is not only applied uselessly in phthisis but in many other conditions Iodine upon the cuticle is, I believe, not absorbed, at least I have not been able to find any trace in the urine when it has been thus applied I am a total disbeliever in the sorbefacient action of iodine when used externally whatever it may do when introduced internally I believe that the painting of enlarged glands is always useless and generally injurious for it tends to set up irritation which is of all things to be avoided I have already alluded to the utility of vesication when applied within the vascular territory of a serous effusion Fluid within the pleura, the pericardium, or the knee may be thus removed or lessened, but not by iodine I have more than once experimented on two knees belonging to the same person similarly affected with serous effusion One has been repeatedly blistered and the other painted with iodine, the blistered joint has always shown the greater diminution, the subject of the iodine none or not more than might be attributed to nature I can recall the time when everyone with bronchitis had his chest rubbed with some irritant, generally ammoniacal If we wish to apply local remedies to the bronchial tubes it can only be by inhalation, placed upon the skin we fail to discern any mode by which their influence can be projected upon the remote and disconnected mucous membrane Superstitions die hard Not long ago an eminent physician was called to a distant city to see a child with double pneumonia Two blisters, together covering a large part of the chest, were comprised in the treatment Let us hope that the rest of it was more rational and more comforting The public naturally put faith in local treatment If the disease can be localised what can be more

to the purpose than something which appeals to the locality "The doctor, like the application, is on the spot", he knows both where the disease is and what will do it good The blister may irritate the body but it soothes the soul

Let us act rationally when we can It is perfectly true that we cannot always be rational, sometimes we must be empirical, we may not know in the least how a thing acts but we may be so certain that it does act that we ask no more, this is the case with colchicum in gout and iodide of potassium in syphilis But when we propose to ourselves to establish some mode of action let us be sure that we are guided by sound considerations If we wish to draw blood from an organ by local depletion let us make sure that the vessels upon which we operate have some local connexion with the organ in question If we propose to relieve by vesication let the serum be taken from capillaries which are in communication with those of the suffering part. If we propose to employ counter irritation let us say to ourselves that irritation is one thing and counter irritation is another We know that we can irritate, but as to counter-irritation the sceptical may entertain some doubt and those who are content with one affliction may hesitate about the desirability of adding another

THE DIAGNOSIS OF CERTAIN NOTIFIABLE DISEASES[1]

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MEDICAL SUPERINTENDENT OF THE SOUTH WESTERN FEVER HOSPITAL STOCKWELL

THE accurate and early diagnosis of infective disease always has been and must necessarily be, a matter of anxious consideration in general practice, if only in view of the importance of early isolation, but in these days of compulsory notification it assumes an exaggerated importance I shall therefore attempt to the best of my ability to give a brief summary of the relative value of the various symptoms in the diagnosis of some of the infectious fevers with which I have become impressed as the result of 12 years' daily observation It would obviously be impossible within the limits of a short paper to deal individually with each of the diseases which are notifiable in London, moreover my object is to introduce what should prove to the members of this society a fertile field for discussion rather than to weary them with a too lengthy dissertation I propose, therefore to confine my remarks to the most common, and consequently the most important, members of the group, and for which, moreover, in London the Legislature provides the necessary accommodation—viz, scarlet fever diphtheria enteric fever, and small pox—although the discussion of their differential diagnoses involves a brief allusion to the characteristics of certain other diseases with which they are liable to be confounded

Scarlet fever—The points on which the diagnosis of scarlet fever rests are the following 1. *The length of incubation* when determinable which in the large proportion of cases is three days or a little less It is not often less than 48 hours and very rarely more than four days though exceptional cases are on record in which it has been practically proved to have been as long as six days 2 *The fact that the attack is usually ushered in with a combination of sore throat, headache, and vomiting* Although coupled of course with other general signs of febrile invasion these three symptoms stand out as pre-eminently suggestive of scarlet fever The vomiting is often absent in adults as is the headache at any rate as an ascertainable fact in children The importance of vomiting as an early indication of scarlet fever in children is confirmed by the fact that in a series of 1000 cases in which the history of onset was carefully inquired into vomiting was noted in no less than 60 per cent of them and three-fourths of these patients were children The only other specific fever which shows anything like the same incidence of vomiting is small pox 3 *The association of a characteristic punctato-erythematous rash and tonsilar inflammation with a characteristic appearance of the tongue* dependent on its becoming rapidly denuded of its surface epithelium and so coming to resemble a ripe succulent strawberry The process of denudation may be often recognised as early as on the second day of fever by the clean red appearance of the tip and edges in contrast with the thick coat of fur which usually covers the rest of the surface From the edges the stripping process rapidly spreads towards the centre so that by the third or fourth day of the attack the tongue presents the raw denuded appearance which is so characteristic of scarlet fever It must be remembered, however, that the completeness with which the tongue peels is proportionate to the degree of inflammatory injection of the facial and buccal mucous membrane just as the amount of peeling of the skin is determined by the intensity and persistence of the antecedent eruption Consequently, in the diagnosis of an attack attended with but slight sore throat we are unable to expect much assistance from the distinctive character of the tongue, and it must be confessed that this is very often the kind of case as to the nature of which there may be considerable doubt 4 *A pulse which at an early stage of the attack is often characterised by undue rapidity* A pulse of from 140 to 160 during the first 36 hours in a child of five years of age should give rise to no anxiety Towards the end of the second day, even though the temperature may have risen higher it usually becomes less rapid and assumes a normal febrile relation It should be remembered, however that extreme rapidity of pulse is often an early symptom in pneumonia as well 5 *A temperature the course of which in a simple scarlet fever usually conforms to a well recognised type* The pyrexia lasting usually from five to seven days, is of a markedly pyramidal shape when charted, with the apex, representing the acme of the fever, either on the third or fourth night Defervescence takes place gradually by lysis and is usually spread over four days In view of the misleading statements which are so often made in text books I cannot be too strongly insisted upon that a true temperature crisis in scarlet fever is excessively rare In the septic form of attack characterised by destructive ulceration of the fauces the temperature instead of falling gradually from the third or fourth night, is continued at the same level and assumes a remittent or pyæmic character In the toxic or so-called 'malignant' type of attack which, happily, in London at the present day is very rarely seen, the temperature remains at a high level, usually between 104° and 106° F. until death, which commonly takes place on the fourth or fifth day 6 *The occurrence of characteristic desquamation* I think the statement is justified that peeling of some degree takes place in all cases which have presented a distinct eruption—at any rate, a punctiform eruption It may however, require very careful and minute examination to recognise its presence, particularly in infants and in adults who are endowed with a greasy skin, such as is often seen in young adults the subjects of acne punctata. In an infant so slight and transient may be the peeling that it can only be detected by the nurse in the form of delicate rolls of cuticle which are removed by the towel when the child is being dried after its bath. For this reason the peeling may readily escape observation To a careful observer the first sign of peeling may be apparent as soon as the second or third day of the eruption in the form of a delicate powdering on the surface of the cheek which is at that time vividly injected. The result is an appearance of powder and rouge which is strongly suggestive of the gentle art of self adornment, although it undoubtedly enhances the natural beauty of a beautiful child. In those with a very delicate skin the complexion suggests rather the bloom on a ripe peach A vividly flushed cheek limited in the same manner by the naso-labial folds is seen in many other acute diseases, notably in acute pneumonia, and is not therefore in itself distinctive but it is the delicate powdering of the flushed surface which is so eminently suggestive of scarlet fever Towards the end of the week, before the rash has quite faded, peeling is usually apparent on the neck and on the upper part of the chest, whence it spreads downwards during the course of the ensuing week On parts of the surface where the skin is normally soft and smooth, as for instance the chest, the abdomen, the groins the inner aspect of the arms, and the thighs, the cuticle separates in the form of delicate shreds or scales It is more especially in these regions that the desquamation presents certain characteristics which are very distinctive of

[1] A paper read before the South-West London Medical Society on May 10th 1899.

the disease At the earliest stage as soon as the tension of the skin associated with the inflammatory hyperæmia of the rash has subsided, on careful inspection the most superficial cuticular layer will be found to present a number of small perforations of about the size of a pin's head or larger which give to it a "worm eaten" appearance, each of the "pinholes" corresponding to one of the finely papular constituents of the recent eruption of which the delicate investing layer has become rubbed off During the next few days each of these little "pinholes" or rings becomes gradually larger by centrifugal extension until its periphery becomes merged with those which have spread from other and neighbouring centres As a result anything suggesting this ring like arrangement then becomes indistinguishable and more or less triangular islets or shreds of cuticle remain, which are ultimately shed, thereby completing the desquamative process so far as that portion of the surface in concerned The early stage of the peeling, then, is characterised by this "pinhole" appearance of the cuticle and the later stage by these "islets" or irregular shreds of epidermis which are the last to separate This peculiarity yields trustworthy evidence as to the peeling being scarlatinal, and, moreover, according to its progress, and the parts of the surface which have become invaded, valuable indications may be derived as to the length of time which has elapsed since the commencement of the attack

7 Lastly, from the confirmatory evidence which is often afforded by *the supervention of one of the well recognised complications of scarlet fever*, chief of which are, of course, otorrhœa, cervical adenitis, nephritis, and rheumatism There are certain facts connected with the appearance of these complications which are well worth remembering when one is concerned with their value as confirmatory evidence of scarlet fever The otorrhœa, for instance, is practically limited to young children, its percentage incidence falling progressively from 18 5 in the first quinquennium of life to 0 7 in the fourth quinquennium The cervical adenitis shows a progressive fall from 11 7 in the first quinquennium to 1 4 in the fourth Renal inflammation, as evidenced by either acute nephritis or simple albuminuria, remains pretty constant at all ages, though definite acute nephritis is relatively rare after 15 years of age Scarlatinal rheumatism, on the other hand becomes more frequent as age advances, its incidence rising from 0 4 per cent under five years to 13 6 per cent in persons aged 20 years and upwards Another striking point in connexion with the rheumatism is a remarkable constancy in the time of its appearance—viz, almost invariably the fifth, sixth, or seventh day of the attack, at a time when the rash and fever in simple scarlet fever are just disappearing

These, then, are the main indications on which we rely for the diagnosis of scarlet fever A well developed attack should present no difficulty, and there is really no excuse for mistaking it for any other disease But the case may be very different. It is the ill developed or negative attacks which so often give rise to very great difficulty and constitute the *bête noire* of the general practitioner who is but too often expected to be endowed with intuitive perception—the kind of attack which causes one to ask oneself, "Is there sufficient evidence in this case to justify the diagnosis of scarlet fever?" "Must I insist upon a prolonged and often, both to the patient and his friends, an irksome period of isolation which may possibly be, after all, unnecessary?" Or, on the other hand, "Am I justified in letting this patient remain where he is with the ultimate possibility of disaster?" It must be confessed that in some cases the question is unanswerable by any human observer, but I think that if cases be carefully tested by the criteria which I have enumerated their number will not be very considerable.

Now, turning to the differential diagnosis of scarlet fever it may, I think, be fairly stated that there are two classes of ailments with which scarlet fever is most liable to be confounded First, those in which sore throat is the prominent feature—viz, simple tonsillitis, diphtheria, and certain cases of influenza, and secondly, those which are attended with a diffused red exanthem—viz, measles, rötheln, and a condition resulting from the administration of certain drugs Now the differentiation of simple tonsillitis from mild scarlet fever may be an extremely difficult thing, especially in adults, in whom the sore-throat is often accompanied by a distinct rosy efflorescence on the skin This, however, is usually limited to the chest and the abdomen, perhaps invading the arms as well, but it is rarely seen on the legs It lacks the punctate character which is so distinctive of the scarlatinal eruption, being represented by a simple erythematous flush, which, though often vivid at an early stage, rarely persists for more than from 24 to 36 hours and leaves no staining of the skin behind There is probably an absence of prodromal vomiting and the tongue retains the character which is almost invariably associated with tonsillitis It is pale and flabby in appearance and is coated with dirty white pasty fur, so different to the rapidly cleaning tongue of scarlet fever This distinction is most important, as there is no form of sore throat other than that associated with scarlet fever which is attended with a clean, much less a raw, tongue Frequent careful and minute inspection of the skin will fail to reveal any indication of peeling, except perhaps on that portion of the neck which has been previously covered with a poultice or a hot fomentation, but even here there is an absence of any "pinhole" arrangement In an adult or older child the occurrence of rheumatic pains and tenderness in any of the joints, especially in the wrists or the metacarpo phalangeal joints from five to seven days after the onset of a febrile sore-throat of doubtful nature, is strongly indicative of the case being one of scarlet fever, and the same inference attaches to the appearance of otorrhœa in a young child though not perhaps appearing until two or three weeks later Simple albuminuria is as common during the febrile stage of simple tonsillitis as it is in scarlet fever, but the supervention of either simple albuminuria or acute nephritis during the second, third, or fourth week is strongly in favour of the latter Simple tonsillitis but very rarely occurs in young children In them a definite inflammation of the faucial structures, except as part of a general catarrh, almost invariably means one of two diseases—viz., scarlet fever or diphtheria

The differentiation of scarlet fever from diphtheria is often confused owing to the fact not being sufficiently well recognised that an exudation is occasionally present on the tonsils in scarlet fever, which is certainly not diphtheritic The exudation of scarlet fever, which was, I think, first described by Professor Henoch under the name of "scharlach nekrose," is only found in cases attended with severe faucial inflammation It is limited to one or both tonsils and does not encroach either on the palate or the uvula It is more cheesy and friable in consistence and never presents the glistening or fibrous appearance which is so often seen in true diphtheria Further and more general points in the differentiation between scarlet fever and faucial diphtheria will be referred to when dealing with the latter disease

The fact that tonsillar or faucial inflammation is occasionally the most obvious manifestation of certain attacks of influenza is responsible for its being sometimes mistaken for scarlet fever, and it is probably within the experience of many practitioners that a whole series of attacks of this protean disease at one time or another have conformed to this type and so contributed to the confusion, at any rate at an early period of the epidemic The absence of a punctiform eruption and of early cleaning of the tongue, the irregularity of the temperature, the intensity of the prostration, and the relative immunity of young children are points which tend to exclude scarlet fever

Now, in respect to the eruptive diseases which most frequently simulate scarlet fever—viz, measles and rötheln (or German measles)—the latter is the one which is most often a source of difficulty, the reason being that both rash and sore throat are normal accompaniments of rötheln The differentiation from scarlet fever is sometimes exceedingly difficult The points on which reliance must be placed are the following 1 A longer period of incubation, usually 10 days or rather more 2 An absence of prodromal vomiting and actual pain in swallowing 3 The rash is usually the first sign, indeed, it may be the only sign, of illness 4 The temperature is frequently normal throughout and is rarely raised for more than from 24 to 48 hours 5 The eruption is usually measly at an early stage, though the spots are usually pinker, smaller, and more discrete than in true measles At a later stage, usually by the second day, the eruption tends to become erythematous on the trunk, when no suggestion of individual spots can be made out, and this is the time when its likeness to scarlet fever is most confusing Unlike scarlet fever, however, definite spots are to be seen on the face in most cases, though rarely visible there for more than from 36 to 48 hours The eruption generally will in all probability have disappeared, even from the legs, by the end of

the third day though a very fine mottling may still be present in a good light on the extremities. 6. Neither more than slight redness and catarrh will be found in the fauces and it is not uncommon for the catarrh to affect the naso-lacrymal mucous membrane to a slight extent. 7. The tongue never becomes smooth-cream much less raw and "strawberry" and transient pustules perhaps more pronounced than in the average case of measles, may be seen on the trunk and limbs. It is never of the "mottled" variety and does not show on the palate and soles. 8. The most striking distinction which Rubella commonly exhibits as opposed to scarlet fever is a tender enlargement of the cervical chain of glands in the posterior cervical region and of those lying over the mastoid bones. They may be slightly enlarged in scarlet fever, but never I believe tender, whereas in rubella it is no uncommon for an adult to complain of tenderness in this region even for a day or two before the rash comes out. This complaint of tenderness in the parotid region is most important.

Now, as regards true measles the points of distinction between it and scarlet fever are so well recognised that I hesitate to recapitulate them in detail. The points, however, which present themselves promiscuously to one's mind are the following: 1. The comparatively long incubation of measles. 2. The presence of definite laryngitis, nasal, and respiratory catarrh usually for two or three days before the rash appears, giving the patient an air of unalloyed misery. 3. The temporary decline of temperature just before the rash comes out and the redness of tongue on its appearance. 4. The spotty character of the eruption as opposed to the more continuous and confluent rash of those of scarlet fever—the fact that the spots usually are first discernible at the sides of the forehead and behind the ears at the margin of the hairy scalp and that they definitely invade the face and especially the region round the mouth, which in scarlet fever remains pale and unaffected. 5. The fact that there is no definite inflammation of the faucial mucous membrane except as a part of a general catarrhal affection of the mucous surfaces, and certainly no ulceration of the tonsils with enlargement of the subacute lymphatic glands. 6. The liability to the superimposition of bronchial or pulmonary inflammation and the absence alike of those complications and the subsequent desquamation which are so characteristic of scarlet fever. 7. Lastly the fact that the temperature in uncomplicated attacks falls suddenly by crisis within 36 hours of the appearance of the eruption, instead of declining gradually hand in hand with it, as is the rule in scarlet fever.

These are the points which usually suffice to make the distinction easy. When we are confronted with a case which gives rise to any difficulty it is usually in respect to a case of scarlet fever which presents characters suggestive of measles, rather than a case of measles simulating the appearance of scarlet fever. Cases of scarlet fever do sometimes occur in which there is an amount of conjunctival injection with obvious lacrymation at an early stage which are not unlike measles and the rash in parts may be of a blotchy and decidedly morbilliform character which further tends to heighten the similarity. The conjunctival injection, however, passes off after the first 24 hours and does not extend to the adjacent mucous surfaces while the measly character of the rash is usually confined to the limbs and never invades the face or circum-oral region.

Now, of the drugs which are liable in certain persons to set up an exanthem which may simulate the eruption of scarlet fever the only ones which have fallen within my own experience are copaiba, salicylic acid, antipyrin, belladonna, and iodoform. The rashes resulting from their administration have been in each case erythematous, though in the case of copaiba and belladonna there may be a distinct suggestion of punctation. The general aspect of the case, however, coupled with careful inquiry into the history and the absence of any other signs of scarlet fever should make its recognition pretty certain.

Diphtheria.—In the diagnosis of diphtheria the fact has been recognised for some years that the presence of exudation or false membrane alone cannot be regarded as the infallible criterion of diphtheria as was taught by Bretonneau in the year 1826 and has been almost universally accepted until quite recently. It is now customary to regard the presence or absence of the Klebs-Löffler bacillus as sufficient to determine the diagnosis. Although in the large majority of cases this relation holds good a more extended observation has shown that the test in actual practice is not by any means so reliable an indication as has generally been held and this for two reasons. In the first place not only do we occasionally come across a typical and even severe or fatal attack with distinct clinical features of diphtheria in which careful and repeated examination of the throat and secretions fails to reveal the presence of a single diphtheria bacillus but characteristic and even virulent bacilli may not infrequently be found in the throat secretions of perfectly healthy persons especially if they have been in contact with cases of diphtheria. Indeed one of the most typical and virulent cultures of diphtheria bacilli which I ever remember to have seen was obtained from the throat of a medical colleague who was at the time and subsequently in his normal health with no suspicion even of a sore throat. And the same thing may often be demonstrated in respect to the nurses who are working in the diphtheria wards. No whatever be the cause this may have in regard to their infection it one would certainly not be justified in saying that these persons were suffering from diphtheria. Again, in a consecutive series of 240 cases of scarlet fever in which the throat secretions were bacteriologically examined diphtheria bacilli were detected by Dr Sims Woodhead in 23 per cent. of them, although only four presented features which suggested the presence of diphtheria. Hence or Marchand found diphtheria bacilli in 53 per cent. of his scarlet fever cases. Moreover the more or less persistent rhinorrhœa which is so often seen during convalescence from scarlet fever in young children is perhaps the majority of cases found to be teeming with bacilli which are morphologically difficult to distinguish from those of true diphtheria. In some of these at any rate, as was shown by Dr Todd of the London Fever Hospital, the discharge contained genuine Klebs-Löffler bacilli, as evidenced by their virulence when injected into susceptible animals. It is a curious fact that the bacilli in these cases are almost invariably limited to the nasal discharge and do not invade the faucial or laryngeal mucous surfaces, and though their presence is unattended by any visible exudation or clinical evidence of diphtheria the possibility of their becoming a source of infection under favourable conditions cannot be ignored. Although a negative bacteriological examination cannot unfortunately be regarded as quite conclusive a strong presumption is made out in favour of the case not being one of diphtheria in the hands of an expert observer. The second and to my mind an even stronger argument against the infallibility of the bacteriological test is the wide difference of opinion which exists amongst eminent bacteriologists as to what is and what is not a diphtheria bacillus. A bacillus which is regarded by one observer as a true bacillus which has undergone a temporary attenuation is held by another equally experienced observer as a pseudo-bacillus, or one which is of an entirely distinct species and incapable under any circumstances of acquiring virulent pathogenic properties. To the first observer the case is one of diphtheria, potentially at any rate, to the other it is no a case of diphtheria at all. Until the limits of normal variation both in respect to form and virulence can be agreed upon no practical differentiation is possible and as long as an appeal to the results of inoculation into the lower animals is necessary for a decision the test must remain of limited value in practice.

Having now briefly alluded to the disabilities which attack the bacteriological test in the diagnosis of diphtheria one may summarise its utility in actual practice as follows. A negative result after careful examination of material taken from the throat and of the culture derived from it on at least two occasions may be held practically to exclude diphtheria. A positive result after examination of a throat presenting a definite pellicular exudation or from the larynx without visible exudation on the fauces may be regarded as sufficient evidence of diphtheria. The presence of short bacilli (suggesting diphtheria bacilli) in the nasal discharge alone even though attended with isolated spots of exudation on the tonsils cannot be held to be distinctive unless confirmed by inoculation into animals.

The procedure required to secure a bacteriological examination is, I have no doubt familiar to most and in view of the importance attaching to the early recognition of diphtheria both for successful treatment and for speedy isolation and having regard to the facility with which the practitioner is now able to get the examination made for him it is very desirable that he should be prepared with the necessary equipment. All that is required is a couple of test-tubes the one containing a sterilised swab of cotton wool for taking

material from the throat and the other some inspissated blood serum, preferably Loffler's preparation, on which the material is sown by simply rubbing its surface with the swab These tubes can be procured at very small cost from the Jenner Institute, the Clinical Research Society, Messrs Burroughs, Wellcome, and Co , and other druggists of repute, and as they will keep for months in a cool place two or three of them may be kept for immediate use should occasion arise

In the differential diagnosis of faucial diphtheria it is mainly in connexion with follicular tonsillitis and the exudation throats present in some cases of scarlet fever that difficulty is most often experienced From follicular tonsillitis the differentiation may be most difficult, and, indeed, it may be impossible apart from the bacteriological test The distinction is rendered none the less difficult owing to the fact that in some cases of diphtheria the exudation commences at the very points which are most characteristic of follicular tonsillitis—viz , at the mouths of the follicular crypts in the form of spots or little patches of exudate which at a later stage enlarge and ultimately become confluent so as to form a continuous pellicle covering the surface of the tonsil, but at an early stage the appearance of both is very similar The clinical features on which some reliance can be placed are that in follicular tonsillitis the spots rarely coalesce and the exudation never spreads to adjacent parts but remains limited to the tonsils Both tonsils are usually affected very much to the same degree and the same thing holds good for the swelling of the subjacent glands, while in diphtheria it is perhaps more common for one side to be involved more than the other and for the gland swelling to be proportionally greater In follicular tonsillitis albuminuria is far less common, but the temperature is usually higher—in fact the general statement is justified that the constitutional disturbance in follicular tonsillitis is likely to be more pronounced than in a case of diphtheria of sufficient mildness to be mistaken for it It should be remembered, too, that in a child the attack is more likely, *primâ facie*, to be one of diphtheria than of tonsillitis simply because in childhood the latter disease is relatively uncommon Laryngeal implication never supervenes, nor does any subsequent paralytic affection, whether of the palate, accommodation, or of the skeletal muscles—so distinctive of diphtheria

Now, of those cases of scarlet fever which are attended with an exudation simulating the appearance of diphtheria it may be stated generally that they are almost invariably severe attacks and the characteristic symptoms of scarlet fever are usually so pronounced that the presence of that disease can hardly be overlooked The difficulty in this instance is usually to decide whether the exudation is purely scarlatinal or whether, as is sometimes the case, it is an attack of scarlet fever complicated with coexistent diphtheria The scarlatinal exudation is limited to the tonsils practically always, it is of a cheesy, friable consistence and it is easily removed with a camel hair brush, tending to disappear spontaneously in a day or two If it be genuine diphtheria, on the other hand, it is usually thicker, tough, gelatinous, or fibrous looking, incapable of removal without lacerating the subjacent tissue, and it separates *en masse* after an interval of several days In a case of uncomplicated diphtheria, of course, the exudate may be thin, friable, and easily detached, but in these concurrent attacks the condition is usually grave and the exudation as a rule presents the characters which I have mentioned The constitutional depression, too, is severe and the case is very liable to terminate fatally with cardiac failure or to present some form of paralysis during early convalescence As far as my experience goes it is much more common for a case of diphtheria attended with an erythematous flush to be mistaken for scarlet fever than for a case of scarlet fever with exudation to be confused with diphtheria

In laryngeal diphtheria or membranous croup the differential diagnosis from simple laryngeal catarrh may be very difficult during the early stage, and this is particularly so when the larynx is the primary seat of the disease It is very fallacious to place any reliance on a history of exposure to cold or on the apparent absence of any source of infection Nor can any trustworthy indication be derived from the character of the respiration or the quality of the cough or laryngeal sound I know of no other reliable test than a bacteriological examination of some of the laryngeal mucus which can be easily obtained by passing a swab mounted on a bent wire into the upper part of the larynx But this, of course, means the loss of valuable time unless the diagnosis can be made by means of an immediate microscopical examination of the material on the swab, which is usually possible to anyone conversant with the diphtheria bacillus and which in most cases will prove reliable The fact that "cases of simple catarrhal laryngitis are never fatal" is not of much assistance in the early diagnosis of the condition. In cases, however, in which the fauces are involved primarily or even coincidently with the larynx—a condition which is of common occurrence—there is not much room for doubt The appearance of the very smallest patch of exudation on the tonsil in a case of croup is practically sufficient to establish it as one of laryngeal diphtheria and calls for prompt and efficient treatment This is above all the class of case for showing what a splendid weapon we possess in antitoxin

Enteric fever —Let us now turn our attention to enteric fever, a disease of which the diagnosis is liable to be attended with more difficulty probably than in the case of any other specific fever There are several reasons why this should be so 1 In its clinical appearances it so often simulates some other disease 2 There is frequently a complete absence of any symptoms referable to the abdomen, consequently a diagnosis can only be arrived at in many cases by a process of exclusion 3 It is very prone to become complicated by some other disorder, particularly bronchitis, pneumonia, and alcoholism, of which the symptoms are liable to be so prominent as to obscure the ordinary manifestations of enteric fever 4 Lastly, the indications suggesting the presence of enteric fever may not be apparent until the lapse of a week or more, and, having in the meantime formed a different opinion as to the nature of the attack, we are liable to be hampered in our diagnosis by the influence of a preconceived idea

In most cases of enteric fever the development of the attack is undoubtedly slow and insidious, but by no means necessarily so I have met with a good many cases of enteric fever in which the onset was as sudden and explosive as in any case of small pox or influenza and these cases almost invariably run a severe course During the first week of enteric fever, in addition to the usual complaint of headache, weariness, aching of the back and limbs, progressive loss of appetite, coating of the tongue, vague pains in the abdomen, and increasing pyrexia, there are four symptoms which are very suggestive of oncoming enteric fever, though not often mentioned, as far as I remember, in the text-books—viz , slight bronchial cough, sore throat, partial deafness, and bad dreams A patient will frequently admit upon being interrogated that he has slept badly, often during the night waking suddenly with a start in consequence of some transient nightmare which he has probably quite forgotten in the morning until it is recalled to his mind by a leading question On inquiry into the history of the onset it will usually be elicited that there have been short periods of intermittent diarrhœa, rarely of longer duration than a day or two, which may or may not reappear during the progress of the fever The fact cannot be too strongly emphasised that diarrhœa is by no means a necessary attendant of enteric fever If 100 consecutive attacks of all grades of severity be taken it will be found that, in this country at any rate the large proportion (if we except the slight premonitory diarrhœa referred to) are characterised by constipation throughout and require the routine soap-and water enema every third day If however the severe attacks alone be taken the majority will be found to have been attended by diarrhœa of the usual pea soup character

Of the other characteristic indications of enteric fever a few words must suffice The typical daily remittent temperature declines gradually during defervescence A termination by crisis hardly ever occurs in enteric fever unless the case has been complicated, usually by pneumonia This may affect a small patch of lung simply and not necessarily an entire lobe It will have been sufficient to delay the normal defervescence of temperature which would otherwise have taken place, but when the pneumonic crisis occurs the temperature falls suddenly, since the enteric fever may no longer be able to provide for its further sustentation A slow pulse is occasionally met with, the rate at no time rising above from 44 to 60 beats although the temperature may have ranged from 101° to 103° F for a considerable time These "slow pulse" cases in my experience have always done well, though Murchison seems to have regarded them as of unfavourable omen The eruption is

never seen before about the end of the first week, but spots may come out at any time afterwards until the temperature has reached the normal. Their number conveys no indication of the severity of the attack as it does in typhus fever. About 30 per cent. of the cases are unattended by a rash and the large majority of these are in children. One cannot expect to find palpable evidence of enlargement of the spleen until the end of the first week and the enlargement can rarely be detected later than two or three days after the temperature has begun to fall. Personally, I am very sceptical as to my ability to recognise enlargement of the spleen in enteric fever with certainty unless I can feel its lower border beneath the costal arch. I have often seen the observation as to the absence of enlargement discounted in the post-mortem room. Obvious desquamation occurs in from 30 to 40 per cent. of enteric fever convalescents. It is for the most part limited to the trunk, is scaly, and is never, I believe, of the "pin hole" variety.

During recent years a great deal of interest has centred round what is usually known as Widal's reaction (it should more justly be called the Gruber-Durham reaction, though Widal was the first to apply it as a test for the recognition of enteric fever). It may be briefly described as the faculty which is possessed by the blood serum of a person suffering from, or recently convalescent from enteric fever of causing the bacilli in a 24 hours broth culture to lose their motility and range themselves together into clumps instead of remaining in active movement as isolated individuals spread all over the field. Now, the possession of this power of causing agglutination by enteric serum may with certain restrictions be regarded as a test of distinct value. It must be remembered that normal blood serum undiluted, or if but slightly diluted, will after a time produce a certain degree of clumping and that the bacilli in a drop of culture when placed on the slide will after a time lose their motility and often evince a tendency to clump without any admixture of enteric serum at all. Hence a standard degree of dilution for the serum and a standard length of time within which the reaction must occur have to be fixed before any conclusion can be drawn as to the claims of any particular serum. A dilution of one in 10 and a period of half an hour have until recently been the standards adopted, though a dilution of one in 20 or one in 30 is now regarded as more reliable.

In order to illustrate the degree of reliance which may be placed on the serum test I cannot do better than summarise the results obtained in two series of cases which were tested by separate observers. The first, consisting of 125 cases was published by Dr. Colville and Dr. Donnan of Belfast in the *British Medical Journal* in 1898, and the second, comprising 184 cases was reported by Dr. Kirton of the Brook Hospital in the Medical Supplement to the Metropolitan Asylums Board Report for 1897. Of the total 309 cases examined, 206 were proved to have been enteric fever either by undoubted clinical or post-mortem evidence and 103 were decided not to be enteric fever either at the time or as the result of more extended clinical observation. Of the 206 cases of enteric fever the blood serum gave the reaction in 201 (although it is fair to state that in seven of them the reaction was not very complete), and of the 103 cases which were not enteric fever in only one did the reaction occur and that, curiously enough was a case of typhus fever—that is to say, in only six out of 309 cases or rather less than 2 per cent., did the serum test fail to support the diagnosis. The reaction it should be remembered, is rarely obtainable before the sixth or seventh day of the attack and in some cases the serum ceases to react before the expiration of three months from its commencement, though it can often be obtained for two years or more after recovery but usually in a less complete degree. This fact should lead to careful inquiry into the previous history. Though by no means difficult of application there are probably few practitioners who are likely to keep by them the necessary equipment, which includes a living culture of enteric fever bacilli of not more than 24 hours existence. In view of the ease, however, with which one can get the examination made at the Jenner Institute or at other accredited laboratories it is well to keep at hand the means necessary for collecting and transmitting a few drops of the blood of any suspected case. All that is required is a sterilised capillary pipette (Pakes's tube) a little ether, and a sharp needle.

Now, of the diseases which are most likely to be mistaken for enteric fever and indeed, frequently are mistaken for it perhaps the most important are, first, a group of affections characterised by abdominal inflammation—viz., febrile gastro-intestinal catarrh (particularly in young children), tuberculous peritonitis, tuberculous enteritis, ulcerative colitis (which may have been set up by an attack of enteric fever), and appendicitis, and, secondly, certain general diseases especially acute miliary tuberculosis, meningitis (most often tuberculous) pneumonia, ulcerative endocarditis, typhus fever, acute alcoholism and influenza. All these, and a good many others, I have seen mistaken for enteric fever, and often with very good reason, at an early stage. Tempting though it is to enter into a consideration of their detailed specific distinctions, I fear that the time at my command is far too restricted to admit of it. I must therefore content myself with recalling to mind certain positive indications which point to the diagnosis of enteric fever and which in combination must be rare accompaniments of any of the affections which I have enumerated. 1. Some degree of deafness unattended with evidence of mental impairment. 2. Continued pyrexia of a regular daily remittent character rarely showing any period of complete intermission until defervescence which sets in gradually. 3. A papular rash on the trunk, rarely affecting the limbs and still more rarely the face. 4. Enlargement of the spleen to an extent often palpable to the fingers. 5. A positive reaction with the Widal test. 6. The onset of intestinal hæmorrhage or perforation at a later stage.

The reappearance of epidemic influenza during the last 10 years has greatly increased our difficulties. There are some attacks of that now "hardy annual" which I will defy any human observer to differentiate from enteric fever at an early stage, that is unless he may have seen very little of either. The differentiation from typhus fever is not of the same importance in this country as it was 25 years ago but when the disease occurs in London, as it occasionally does even now, the earlier cases are usually mistaken for enteric fever, especially in children, in whom the rash is often absent.

Small pox.—The diagnosis of small pox at an early stage is liable to be confused with measles and also with scarlet fever when attended with a prodromal rash of an erythematous or punctiform character. In the former case the similarity may be very striking, especially if the onset of measles be attended with lumbar pain as is sometimes the case in adults. The absence of vomiting, however, and of the peculiar shotty feel which the rash of small pox soon assumes and the fact that the temperature rises instead of falls when the eruption comes out and that it is accompanied by marked catarrhal symptoms will soon dispel any doubts which may remain. But it is in connexion with chicken pox that mistakes are most often made in the diagnosis of small-pox especially in the modified form of the disease.

The points of difference in connexion with the development of the attack and the distribution and characters of the respective eruptions are well set out in the text-books and are adequate for a diagnosis in most cases, but the fact that chicken pox in an adult is apt to be attended with really severe symptoms of invasion and that in modified small pox the specific distinctions in respect to the eruption may be by no means easy of recognition still leaves room for a very considerable degree of doubt in some cases. There are however, three points which rarely seem to be insisted on even if they receive any mention at all in the text-books. They are well worthy of remembrance as any one of them may be in itself almost sufficient to clinch the diagnosis. 1. In varicella, pocks in different stages of development—papule, vesicle, pustule, and scab—may usually be seen at the same time within a circumscribed area of skin. 2. If a single developed vesicle can be detected upon any point of the skin which 24 hours previously showed no sign of a developing pock even in its early papular stage, that one vesicle is sufficient to exclude small pox altogether. 3. The detection of any cicatrices of antecedent varicella (which on careful scrutiny of the surface are to be found much more frequently than is usually credited) is practically sufficient to exclude varicella, so extremely rare is a second attack of that disorder.

Stockwell, S.W.

SUPERANNUATION ALLOWANCE.—Dr. Richard Purnell, late medical officer of the First District, Wells (Somerset) Union, has been granted a superannuation allowance of about £70 by the Wells Board of Guardians.

PHYSICAL DIAGNOSIS IN THE INSANE

By JAMES F GEMMEL, M B, C M GLASG,
ASSISTANT MEDICAL OFFICER TO THE COUNTY ASYLUM LANCASTER

NOWHERE perhaps is the importance of physical diagnosis more forcibly presented to our minds than in the insane In them we have much more frequently than not it alone to depend upon, and the aid which the general practitioner and hospital physician obtain subjectively, together with the history, is usually wanting or at best unreliable This of itself is a great disadvantage and we would be grateful were it the only one, for another which the asylum physician has frequently to encounter is the resistance of the patient to examination Only those who have experienced it know what this really means The maniacal shouts, turnings, and twistings, to say nothing of more determined efforts to oppose, are circumstances not calculated to facilitate examination Yet such we have frequently to contend against, not only in diagnosing disease in this class of patient but in treating it Catheterism, for example, has often to be performed and wounds dressed in patients assuming the most inconvenient postures Another drawback, the insensitiveness of the insane, from whatever cause arising, to bodily pain and discomfort, is sufficiently well known The numerous instances of retention of urine suspected by the practised eye from perhaps a change in posture or an alteration in walk, strangulated hernia uncomplained of and discovered on bathing or on attention being called to an attack of vomiting, enteric fever recognised when the eruption is out, and numerous other examples of serious bodily disease to which no attention has ever been directed by the patient himself, are experiences which we have all met with Hence it is that apparently very trivial circumstances may often give warning and indicate to our eyes grave illness Notwithstanding, however, the keenest observation we have every now and then disease presented to us in a stage which in sane patients would have been complained of at the outset and have thus afforded an earlier opportunity of diagnosis or at all events an approximate one For the detection, then, of disease in the insane we have to rely almost entirely upon physical diagnosis With these preliminary remarks I propose to mention and briefly describe a few cases by way of illustration, some of them interesting from their comparative rarity and all with one exception from the fact that the history and symptomatology were for practical purposes wanting

Purulent meningitis —The patient in this case was a woman, aged 21 years Beyond the fact that she was known to have a mitral regurgitant murmur there was nothing in her past history having any bearing on her present ailment, of which the patient was quite incapable of giving any account She had for a few days previously to Sept 28th, 1898, not been taking her food as well as usual and as she looked generally ill on that morning she was at once sent to the hospital Her temperature then was 103° F She gave no indication that she could hear what was said to her, was semi conscious, and could scarcely be roused Her muscular system was in a state of extreme irritability and on being raised for purposes of examination she became very stiff and rigid, the head was drawn back, and the muscles of the back of the neck were thrown into a state of tetanic contraction The pupils were dilated and reacted sluggishly, the gums were spongy and suppurated from decayed teeth, the tongue was dry and coated, and the urine was normal Nothing was discoverable in the lungs or abdominal organs to account for her condition Her temperature in the evening rose to 105° and since admission frequent retching and vomiting had supervened On the 30th the temperature still continued high (104°), vomiting, irrespectively of the state of the stomach as to food, was persistent, the bowels were confined, there was retention of urine, the pupils were still dilated, the tongue was dry and foul and the lips and gums were covered with sordes The muscular system was extremely irritable and the patient became rigid on any attempt at movement The pulse was rapid but regular and the respirations were correspondingly increased There was a dark trophic patch on each buttock The patient was quite unconscious On Oct 1st the temperature was 104 8°, the specific gravity of the urine was 1030, it was albuminous, and contained a trace of sugar, the head and eyes deviated to the right, the mouth was slightly twisted to the same side, and there was slight facial twitching The right arm was rigidly flexed and when forcibly extended and let go at once resumed its abnormal position. The eyes were suffused There were dark trophic areas and bullæ on the heels and tarsal prominences On the 2nd the patient was comatose and rapidly sinking She died on the evening of the 3rd, the temperature rising to 105 8° some hours before death

Necropsy —The dura mater was thickened and firmly adherent to the skull cap The pia arachnoid over the convex and basal aspects of the brain was thickened and infiltrated with a greenish yellow exudation of pus dipping down between the sulci and specially thick and abundant in the track of the larger fissures The surface and lateral margins of the cerebellum were also invaded Generally the brain substance was soft and œdematous and the vessels were congested The grey matter was of a deeper colour than usual The ventricles were dilated and filled with a dirty yellow fluid There were hypertrophy of the left ventricle and thickening of the mitral valve The kidneys were congested and the left one exhibited several recent infarcts

Phlegmonous gastritis —A man, aged 66 years, on Dec 22nd, 1896, complained of nausea and vomiting There was nothing, however, in his general appearance to indicate that there was anything very much the matter His temperature was normal but the pulse was somewhat irregular The next morning he rose but fell back and suddenly expired

Necropsy —The heart was found to be enlarged, weighing 14 ounces, the mitral valve was stenosed and the aortic valve was calcareous and incompetent The stomach was greatly dilated, the mucous membrane was congested, and submucous hæmorrhages were present The stomach wall was greatly thickened and on section large quantities of fluid pus exuded from the submucosa which was in a state of diffuse purulent infiltration

Malignant endocarditis verrucosa —No detailed description of this case which lasted about three weeks will be entered upon, but only a general survey of its progress from commencement to finish along with the factors contributing to its differential diagnosis The only clear history obtainable was that some months previously the patient had a severe attack of rheumatic fever from which she slowly recovered, but with an impaired mental condition which gradually becoming more pronounced culminated before admission in an attack of acute delirium Her condition on admission was one of semi consciousness, extreme restlessness, incoherent muttering and screaming, loss of control over the sphincters, constant purposeless movements of the limbs and body, and extreme motor irritability In fact, at first sight the case appeared to be one of severe and fatal chorea which is occasionally to be met with That there were some grounds for the suspicion I think may not very strongly be objected to The patient sometimes refused food, but this was not owing to inability to swallow, as the act of deglutition was normally performed even when the general muscular system was in a state of violent movement, the patient tossing her arms and legs about and rolling her head uneasily from side to side These choreiform movements would suddenly cease and the patient drop into apparently a deep slumber from which, however, she was easily roused The skin was hot and dry and later exhibited a petechial rash, the tongue and lips were parched and covered with sordes, the pupils were dilated and her general appearance indicated some acute febrile affection The temperature was 103° F on the evening of admission and continued more or less elevated throughout, though exhibiting considerable irregularity The urine contained a large quantity of albumin and there was a loud mitral regurgitant murmur, considerable diarrhœa, slight distension of the abdomen, and gurgling were also present from the beginning No rose spots or enlargement of the spleen were ever detected Towards the end the heart's action became extremely rapid, the albumin increased, and coma supervened Throughout muscular irritability was extreme and any attempt at sitting the patient up was accompanied by tetanic rigidity of the erector spinæ muscles Passive motion of the extremities yielded the same state of matters

Necropsy —The heart weighed eight ounces Large warty vegetations were present on the mitral segments and surrounding the mitral orifice The left kidney and spleen were the seat of infarctions and both the kidneys were cirrhotic

Intestinal obstruction.—The patient was a woman, aged 63 years. On admission on Sep. 4th, 1898, she complained of pain and uneasiness in the abdomen, nausea, and vomiting. The abdomen was somewhat distended and there was constipation. Her general condition did not, however, point to anything very serious. This description indicates the state of matters for about a fortnight—vomiting, constipation, pain in the lower region of the abdomen, and distension. About that time the pain and distension increased and vomiting became very frequent. The urine was scanty but otherwise normal, the heart's action was weak and irregular, and there was a localised pericardial murmur. Extreme thirst was a marked feature of the case. As the case progressed the distension further increased and somewhat irregularly, being greater in the right flank than elsewhere. In this region the percussion note was dull and palpation gave a sensation of fluid. Intestinal obstruction from volvulus or stricture of the large bowel was diagnosed, but owing to the cardiac complication and the patient's general weak condition operative interference was not considered advisable. Death occurred a couple of days afterwards.

Necropsy.—At the post-mortem examination the heart was found to be dilated and hypertrophied and the two layers of the pericardium were over the greater portion of its surface loosely adherent. The head of the pancreas was occupied by a cancerous tumour and the pyloric end of the stomach and transverse colon were matted together, the lumen of the latter being almost obliterated by the contraction of firm adhesions. The small intestine above the ileo-cæcal valve had become twisted on itself and the ascending colon was enormously distended with fluid fæces. The presumption is that the increased distension and exacerbation of vomiting which occurred a few days before death were occasioned by the twist in the small intestine.

Remarks.—The signs in the case of purulent meningitis were tolerably characteristic, and as suppuration due to carious teeth was the only source of infection discovered I have reason for concluding that the disease owed its origin to this. I have seen cases of purulent meningitis secondary to necrosis of bone, sloughing bedsore, and cellulitis of the orbit, but this is the first occasion on which suppuration due to carious teeth has come under my observation. Knowing the frequency of such and the filthy condition in which many patients keep their mouths it is well to bear this in mind, more especially in the case of epileptics, in seeking for the source of infection. The appearance on the third day of trophic lesions is also to be noted—a circumstance not infrequently observed in such cases. Another feature was the extension of the inflammation to the ventricles of the brain—a circumstance stated to be very rare and designated by the term "pyocephalus internus." It is possible that the sugar found in the urine may have been due to pressure on the fourth ventricle. The temperature was high throughout. Generally speaking, this is the case and it is not unusual to find it 105°, although in my experience it never attains the height met with in status epilepticus, and in the convulsive seizures of general paralysis. In other cases, however, it may not exceed 100°.

The case of phlegmonous gastritis is interesting from its extreme rarity. There were absolutely no symptoms except the attack of vomiting, and this of itself was nothing to go by. In fact the disease was only discovered post mortem. From the absence of symptoms and the condition of the viscus the case must be considered a chronic one, rare according to Ewald even in this rare disease. In view of the fact that 18 months previously the patient suffered from a somewhat prolonged attack of dysentery attended by extensive sloughing of the rectal mucous membrane, I might further particularise and consider the case as belonging to the metastatic form and having for its origin this condition of the lower bowel. The fact that after his recovery from dysentery he was subject to occasional attacks of vomiting and diarrhœa with motions of the colour of pus is perhaps not inconsistent with the suggestion of a slowly extending cellulitis of the stomach. In the description of the case of ulcerative endocarditis the diseases with which it is most often mistaken typhoid fever, meningitis and miliary tuberculosis have been incidentally touched upon. The muttering delirium, fever, and extreme muscular rigidity of the spinal muscles on attempted movement present in this case are also characteristic of meningitis and miliary tuberculosis. It was only by frequent and careful examination of the lungs that I could exclude the latter. To eliminate the former, however, was not such an easy task, and although I eventually committed myself to the diagnosis of ulcerative endocarditis the differentiation between the two was perhaps not very marked, in fact, the disease might have quite justifiably been diagnosed meningitis. It is known that ulcerative endocarditis may cause meningitis and be of itself attended by like cerebral phenomena without implication of the meninges. Both in the case of purulent meningitis and in the present one organic cardiac murmurs were audible and the general symptoms in both were pretty much the same. No degree of auscultatory precision, however, can distinguish between a murmur due to simple endocarditis and one dependent on the malignant form. The two cases which we are at present contrasting had in addition other features than the cardiac lesion in common. In both there were evidences of marked cerebral and vaso-motor disturbance, muscular irritability as shown by marked rigidity on attempted movement, and albuminuria and high temperature. In the one case, however, there was a history of a severe attack of rheumatic fever with the development of a pronounced cardiac lesion, but with no discoverable focus as in the other to give rise to meningitis. Then, again, the facial convulsions and spasmodic contracture of one arm with deviation of the head and eyes to the same side indicating a lesion within the cranium were present in the one case and not in the other. Further, persistent vomiting and especially the rapid development of trophic bedsores and bullæ were much more characteristic of meningitis than endocarditis. The condition of the bowels and bladder also afford a distinguishing clue, constipation and retention of urine being present in the former and abdominal distension and diarrhœa in the latter. The fundus of the eye was in neither case examined, but the discovery of retinal hæmorrhage or optic neuritis would not have materially assisted in differentiating, as these may occur in either. It is possible that the rigidity and choreiform movements in the present case may have been due to numerous minute emboli, but of this there was no proof. The case of intestinal obstruction is illustrative generally of the difficulties which attend the differentiation of the various causes of this condition. It is also interesting from the fact that the obstruct on was due to an unsuspected cancer of the pancreas. Of this there was absolutely no evidence during life. The patient was well nourished and did not show the rapid emaciation and intense jaundice often met with in cancer of this organ and the abdominal distension prevented the feeling of any such thing as a tumour. Only a few months previously a case of cancer of this gland came under my observation characterised by intense jaundice and rapid emaciation. From the position of the tumour, however, a diagnosis of cancer of the duodenum was made. The latter, though a rare affection has pretty much the same signs as cancer of the pancreas and a diagnosis between the two is almost impossible. The absence of sugar in the urine in the present case has been already mentioned and shows that its presence in affections of the pancreas is not invariable.

Leaving the side issue into which, perhaps, I have been drawn I propose to examine briefly the other feature of interest—intestinal obstruction. That due to volvulus of the sigmoid and stricture as being, perhaps, the most common will alone be considered and only in so far as actual cases have presented points of special interest and difficulty. The characteristic symptoms of acute obstruction as exemplified in a case of volvulus are sudden and severe pain, retching and vomiting, constipation, tympanites, and collapse. In the case of lunatics, however, pain may not be complained of, attention being first directed to the case by an attack of vomiting, and on examination the abdomen is found to be rigid and tympanitic. Such of themselves are however not always sufficient to warrant a diagnosis of intestinal obstruction as they occur under other circumstances, but they are often all we have to go upon at first. In the case, however, of acute obstruction, as from volvulus, the rapid supervention and continuation of collapse, together with absolute constipation though not conclusive, to a great extent narrows the diagnosis, still I have known perforation of a gastric ulcer to come under observation at so late a stage that from the abdominal distension and other symptoms the case closely simulated one of intestinal obstruction.

Taking, then as a basis a series of cases which have come under my observation, let us see if it is possible from a close observation of the signs and symptoms to deduce any facts which will assist a differential diagnosis. Chronic intestinal

obstruction in the insane is often discovered so late that for all practical purposes the symptoms would seem to indicate the acute form No history is obtainable and the earlier symptoms which among the sane would lead one to suspect chronic obstruction have never been complained of by the patient or noticed by the attendant Vomiting collapse, and most probably tympanites may, as already suggested, be the indications that first direct attention to the patient Such is the case presented, what is it? For purposes of limitation I assume that the case is one of intestinal obstruction and the only other condition provocative of somewhat similar symptoms from which it will be attempted to distinguish it is perforation with accompanying peritonitis In differentiating the various forms of obstruction too much stress must not be laid on the age of the patient, for although an age of 45 years and upwards is suspicious of volvulus or stricture it does not by any means exclude strangulation by bands, &c With this reservation, then, and taking for granted that the obstruction of the small bowel has been excluded and that the patient's age, &c, suggest volvulus or stricture, I shall discuss only these two causes of obstruction If the case is seen comparatively early—i e, before the abdomen is excessively distended—the appearance of fulness extending from the left hypogastric and iliac regions towards the umbilicus, together with a feeling of increased resistance and tension communicated to the hand and a development of hyper resonance in this locality point to volvulus If upon these signs supervene an increase in the horizontal diameter of the abdomen and of the resonant area of the colon the diagnosis is rendered still more certain The passage of a long tube or digital examination under chloroform will also tend to confirm In what way, however, may volvulus be distinguished from stricture of the sigmoid? I am still presuming a case in which the patient is admitted to the hospital with vomiting, distension, collapse, and with no history The passage of a long tube only reveals the fact that there is an obstruction in the lower portion of the gut and for differential purposes digital exploration is more valuable If by means of it an irregular hard mass or enlarged glands are felt, the presence of malignant stricture, especially if the left leg and thigh are swollen and the veins are engorged, is practically confirmed If, however, the stricture lie in the upper portion of the sigmoid, or beyond, digital examination or that by the tube affords little or no information and other features of the case have to be considered in order to arrive at any satisfactory conclusion In volvulus, again, constipation is absolute from the first, but in stricture, especially malignant stricture, there is often diarrhœa and discharge of blood Further, in stricture the contour of the colon is better defined and dulness and the feeling of a semi fluid or mouldable mass limited to the region of the cæcum or extending thence in the line of the ascending colon is more significant of this form of obstruction than of volvulus as in the latter these signs are to a considerable extent obscured by the production of gas in a voluminous sigmoid and the lesser likelihood of fæcal accumulation owing to more persistent vomiting &c To the presence of the same may also be attributed the infrequency of coils and visible movement of the intestine in volvulus as compared with stricture The excessive accumulation of fæces in stricture is owing to the prolonged previous constipation and to the fact that food is not vomited to the same extent as in volvulus, in which the accumulation if it exists is in the sigmoid and may when this is very moveable even be the cause of the volvulus Under certain conditions the vomit in stricture may consist almost entirely of blood and that in large quantities When such is the case stricture may be mistaken for perforation of a gastric ulcer or *vice versa* In perforation there may or may not be hæmatemesis, but if owing to rapid collapse attention is drawn and the patient seen before distension of the abdomen from peritonitis has set in, we can, from what has already been said on the subject of stricture, affirm pretty confidently that it at least is not present If, however, the patient comes under observation after peritonitis has set in the diagnosis is rendered more difficult and the probability of ascertaining the state of the colon by palpation is rendered almost impossible by the rigidity of the abdominal walls and great peritonitic distension The age of the patient and the progress of the case will then be our chief guides Gastric ulcer occurs at a much earlier age than stricture and when erforation occurs tends to a more rapidly fatal issue It is of course obvious that profuse hæmatemesis due to stricture of the colon can only occur when the obstruction is malignant and has become adherent to the wall of the stomach

Lancaster

ON "CHRONIC VENEREAL SORES," OR "ULCERATING GRANULOMA," WITH AN ILLUSTRATIVE CASE

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With Note by JAMES GALLOWAY, M D ABERD, F R C P LOND

THE following case affords a typical example of the disease described by myself in the *Indian Medical Gazette* of May, 1898, under the designation of "chronic venereal sores" and which appears to be identical with the affection prevalent in British Guiana and named by Dr J H Conyers and Dr C W Daniels[1] "groin ulceration" At the time that the above mentioned article in the *Indian Medical Gazette* was written I had not had the advantage of seeing the description of the disease given by Dr Conyers and Dr Daniels and I was unaware that any notice of it had previously been published The disease is fairly common in Southern India, and Surgeon Colonel K Macleod's article on the subject in the *Journal of Tropical Medicine* for February, 1899, points to the fact that it is also to be found in Northern India The following are the notes of the case

A Hindoo cigar roller, aged 30 years, was admitted into the Madras General Hospital on Feb 14th, 1899, suffering from sores in the groin and on the penis The history given by the patient was as follows Six months previously, four days after intercourse, a sore appeared on the glans penis Ten days later a bubo formed in the right groin, burst, and discharged sanious fluid Neither the ulcer on the penis nor the bubo ever healed but continued to spread slowly up to the date of admission into hospital Slight local pain and irritation were experienced but the general health was not affected in any way The following note was made of the condition of the patient on admission to hospital "The patient is well developed muscular, and in good health Situated in the right groin is a sore measuring two and a half inches in length by one inch in width There is no induration of the base of the sore which can be freely moved to and fro over the underlying structures The surface, which is raised above the level of the surrounding skin in some places to the extent of a quarter of an inch or more, is irregular, of a dirty pink colour, and somewhat waxy appearance In consistence it is soft but firm and hairs are seen protruding here and there from the surface It is almost entirely devoid of discharge The edges are fairly regular and show no signs either of healing or breaking down A small zone of epidermis is seen to mount, as it were, into the base of the mass of granulation tissue Close to the existing sore is the scar of an old bubo The prepuce is retracted and swollen Situated on the under surface of the glans and body of the penis is a sore which differs in some respects from the one already described The surface is smoother and not raised much above the level of the surrounding skin and scattered over it are numerous small white patches of newly formed epithelium A slightly offensive odour is given off from the sores" On admission to hospital the following treatment was resorted to The skin surrounding the sore in the groin was shaved and thoroughly purified by means of antiseptic lotions and boric acid dressings were applied A month after admission an anæsthetic was administered and the whole of the affected skin in the groin together with some of the underlying fat and lymphatic glands were removed by means of the knife The edges of the resulting wound were then brought together by sutures It was considered advisable to postpone operation upon the penis until the wound in the groin was healed Five days later, slight pain being complained of, the dressings were removed, when it was found that suppuration had taken place and two stitches were removed to give exit to the pus

[1] British Guiana Medical Annual, 1896.

the patient is still under treatment It is important to note that the operation was attended with very free hæmorrhage, the tissues surrounding the sore being extremely vascular

This case is typical of the affection in its chronic stage, the commonest form met with Occasionally the disease takes on a more rapid and destructive action, the edges as well as portions of the granulating mass break down and discharge thin offensive pus and the sores spread rapidly In this way large areas of skin become involved and if the penis be affected the whole of that organ may be destroyed and the scrotum and perineum may become converted into a huge ulcer emitting a very offensive odour At other times attempts at healing take place, the mass of granulation tissue shrinks in size and the sore becomes flatter Islands of epithelium appear here and there on the surface of the sore and healing takes place at the edges. In a fourth class of cases destructive action as well as the healing process progressing simultaneously in different parts of the same sore are seen In all cases the duration of the disease is extremely protracted and the affection seldom undergoes complete spontaneous cure The diseased action always shows a tendency to spread from the groin downwards around the base of the scrotum to the perineum and anal region The orifice of the urethra is very frequently implicated, as is also the anus In both cases cicatricial contraction results and sometimes the result of these complications is that the patient succumbs

In the description of the disease given in Manson's "Tropical Diseases" it is said that "it is practically confined to the pudendal region." This is not the case with the disease as seen in India, as I have myself met with two cases in which the oral cavity was affected as well as the groin In one of these cases the inner surface of the cheek was implicated and in the other the inner surface of the lips the gums and the side of the tongue The wife of one of these patients, who was seen by Captain Giffard, I M S, suffered from a similar affection of the mouth—a fact which strongly confirms the view of the contagious character of the disease

One peculiar feature of the disease is the fact that the general health of the patient is hardly ever affected The exceptions to this rule which I have met with have been those cases in which the mouth was affected and nutrition thus indirectly interfered with, and cases in which stricture of the orifice of the urethra and anus existed On the other hand, when the general health of the patient becomes impaired through any other means the local affection is apt to assume a destructive character

Dr Conyers and Dr Daniels, whilst admitting the possibility of a venereal origin in some cases do not appear themselves to have met with any instances in which there was distinct proof of such being the case They state that "in no case did the groin growth originate in a bubo Indian experience, on the other hand, points to this as being the most usual mode of origin My own observations lead me to believe that the disease is contagious, auto-inoculable and in the majority of cases of venereal origin In male patients it usually commences as an ulcer of the penis or a suppurating bubo Amongst natives themselves the disease is considered to be venereal and so far as I have been able to ascertain all those surgeons in this country who have met with cases of the disease are of the same opinion The disease is frequently diagnosed as syphilis but all the evidence which we possess is opposed to there being any connexion between the two disorders The disease under discussion appears to be purely a local affection, it is never accompanied or followed by constitutional symptoms and its progress is entirely uninfluenced by anti syphilitic remedies At the same time it is probable that in some instances the two diseases are acquired simultaneously as the result of inoculation by mixed poisons, just as occurs in the case of syphilis and chancroid Bearing this in mind and also the possibility of the existence of previously acquired syphilis it is easy to understand why these patients sometimes manifest signs of the latter disease Much of the confusion in diagnosis which we hear of is doubtless due to the existence of these cases of mixed infection

A point of particular interest in regard to the pathology of the disease is the fact that even in long standing cases all the structures of the skin are not destroyed An examination of the sore in many cases reveals the presence of short hairs piercing the mass of granulation tissue This was seen in the case described above. Further evidence of the fact that many of the structures of the skin escape destruction is furnished by the results of the operation of excision In this operation all the granulation tissue is thoroughly scraped away and the resulting wound is cauterised with Vienna paste Not when healing action follows numerous islets of new epithelium spring up in various directions on the surface of the sore In respect of this peculiarity and also in the appearance of the sore in its early stages the affection presents a remarkable resemblance to 'yaws' So much is this the case that it would be difficult to distinguish the one from the other did the diagnosis at this stage depend entirely upon the physical characters of the sores themselves In yaws, as is well known, the lesions are multiple and may be distributed over the whole surface of the body and not confined to one particular region, as in the case of this disease Moreover, the sores never attain the same size in yaws as they do in the other affection Dr Galloway[2] states that there is a close histological resemblance between the two diseases

In many of the cases cited by Dr Conyers and Dr Daniels the disease appears to have been complicated by an elephantoid condition of the affected region and Colonel Branfoot I M S, who has met with a considerable number of cases amongst women in India, informs me that he has seen a similar complication in many of the patients who have come under his observation There is no reason to believe, however that such a condition is anything more than an accidental complication In no case which has come under my observation has there been any changes resembling those seen in elephantiasis

In regard to the incidence of the disease our experience in India coincides with that of surgeons in British Guiana The disease appears to be confined to young adults or middle aged persons and to be limited to the coloured races

In the matter of treatment also there appears to be a coincidence of opinion between medical men in the two countries The disease is seldom if ever influenced by any constitutional treatment or by the effects of any local applications Thorough removal of the soft tissue by means of a sharp spoon followed by the application of Vienna paste to the firm and fibrous looking structures beneath, is sometimes followed by apparent cure, especially when the sore is limited to the region of the groin Complete excision of the sore is more effective but cannot be effected in many instances When the penis is implicated and the disease is of long standing amputation through healthy tissue should be performed

Note by Dr JAMES GALLOWAY —*Lieutenant Colonel* Maitland, I M S, has been good enough to send me portions of the affected skin and a neighbouring lymphatic gland removed from the patient whose case is described in this paper The skin presents histological changes agreeing with those which I have already described in detail in the *British Journal of Dermatology*[3] The portion of skin examined is in a later stage of the disease than the specimen from which my illustrations were drawn The infiltration in the cutis is very dense and consists of cells of the same type as those described The striking feature is the great masses of "plasma cells" and the absence of ordinary leucocytes Much new and very dense cicatricial connective tissue is present transforming the cutis and breaking up the new cell infiltration into separate masses There is almost no tendency to liquefaction or any rapid degeneration in these masses of "plasma cells" Small areas are seen in which the cells present indistinct outlines, but in these the nuclei are fragmented and debris of chromatin granules is plentiful Throughout the cutis the vessels are much dilated and in the lower part this change is so great as to simulate certain of the cutaneous angiomata In the deeper layers of the skin and subcutis the glands are seen to be present with apparently healthy epithelium, some have undergone cystic dilatation The epidermis of the surface is very thin and atrophied, but numerous peg like processes of epithelium project down into the transformed cutis and possess apparently healthy epithelial cells These are the relics of the long interpapillary processes of epithelium which form so striking a feature in the early stage of the disease, which is often papillomatous The observations on these tissues corroborate the conclusions previously arrived at,

[2] Ulcerating Granuloma of the Pudenda (illustrated) British Journal of Dermatology vol. ix. p. 133, 1897

[3] Loc. cit

that the disease is a chronic "infective granuloma" quite distinct from syphilis and tuberculosis, presenting certain histological peculiarities recalling the structure of framboesia (yaws) but differing from this disease in its clinical course and general anatomical features and distribution There can be no doubt that the disease described by Lieutenant-Colonel Maitland and Surgeon Colonel K Macleod in India is identical with the "groin ulceration" described by Dr Conyers and Dr Daniels in British Guiana

Madras.

SOME CASES OF MALIGNANT DISEASE ASSOCIATED WITH OVARIAN TUMOURS.

BY JOHN D MALCOLM, M B, F R C S EDIN,
SURGEON TO THE SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, MARYLEBONE ROAD W

IN this paper I propose to record very briefly some cases of malignant disease associated with ovarian tumours By "malignant disease" I mean either (1) that the tumours have been examined by competent microscopists and have been declared to be malignant in structure (carcinomatous or sarcomatous), or (2) that in addition to ovarian tumours growths have been found in the liver, peritoneum, or other organs when an operation has been performed, or (3) that such growths have developed later and have brought about the death of the patient In most cases these secondary growths have been examined and found to be of malignant structure, but in some cases there has been no post-mortem examination When I state the microscopic appearances of a tumour I do so on the authority of Mr Targett or of Mr Corrie Keep and I have to express my thanks to these gentlemen for permission to use their names

It seems to me that the possibility of an ovarian tumour being malignant is not kept before the profession so prominently as its importance deserves A large number of papers on ovariotomy are devoted to statistics of mortality, to showing how very easy and satisfactory the operation is, and to proving that the death rate is very low When these are the objects aimed at the papers may be published so soon after the patients have been operated upon that in a large proportion of the cases there has not been time for secondary growths to develop and, moreover, in discussing the mortality of an operation it is not necessary to bring forward other disagreeable sequelæ Statistics having scientific value are most difficult to collect and on the question of malignancy in ovarian tumours it is almost impossible to obtain reliable figures The number of cases which cannot be traced, the number of cases in which the cause of death is not verified by conclusive clinical or post-mortem evidence, and the long time which may elapse between the removal of a tumour and the development of malignant disease are difficulties which can hardly be completely overcome The question requires many years of careful clinical and pathological work, every tumour being thoroughly investigated and every case being kept under observation for a long period—till death if possible—before even an approximate estimate of the percentage of malignant cases can be obtained I regret that I have not paid special attention to this subject for more than a few years, its enormous importance having been gradually forced upon my attention. I therefore do not propose to record any statistics of my own The following instances, are, however, sufficient to prove conclusively that in a number of cases the relationship between an ovarian tumour and malignancy is very intimate

CASE 1 —On May 8th, 1888, I assisted Mr Knowsley Thornton to remove a rapidly growing, very multilocular cystic ovarian tumour from a woman, aged 42 years The growth was adherent to everything it touched The uterus and left ovary were healthy Mr Thornton in his notes of the case wrote that the tumour "might be malignant" Three and a half months later (on August 23rd) I opened this patient's abdomen on account of obstruction of the bowels and I found several small round growths of from the size of a pea downwards and a mass of about the size of a Tangerine orange implicating two coils of small intestine I was informed that this patient's father had died from cancer of the gullet at the age of 68 years The father's sister had died from a cancer and his mother had died from a tumour The case is already published in full [1]

CASE 2 —I have published [2] another case in which I performed an easy ovariotomy on June 6th, 1893, the patient's age being 35 years There were a few slight pelvic adhesions and I noted that there was a small piece of solid tissue in the base of the tumour The patient had no trouble for more than two years after the operation She then became very constipated and this difficulty increased rapidly On Jan 28th, 1896, I explored the abdomen, the bowel being then almost completely occluded There were numerous growths studded over the peritoneum and large masses on the under surface of the liver I made an intestinal fistula which gave temporary relief A great aunt of this patient was said to have had cancer of the breast

CASE 3 —On Oct 8th, 1895, I saw a patient, 47 years of age, from whom Dr Pregaldino of Ghent had removed a tumour of the right ovary which, he kindly informed me, was an adeno carcinoma The patient recovered from the operation quickly, put on flesh, and felt very well until a short time before I saw her when she began to suffer from pelvic pains and a vaginal discharge She had the appearance of being in excellent health I found a tumour on the left side of the uterus, rising above the pelvic brim, involving the cervix and fungating into the vagina It seemed to me to be semi cystic It extended so far into the tissues on the left side of the pelvis that complete removal was impossible. The patient died nine months later

CASE 4 —On Aug 16th, 1892, I saw a patient with Mr Crew of Higham Ferrers She was 25 years of age and was supposed to be quite well on July 30th when she left her home on a visit to friends She had noticed an enlargement of the body before this but had not spoken of it On August 1st she was seized with severe pain in the abdomen and on the 11th a medical man said that she was so ill that she could not travel It was, however, very desirable that she should go home and Mr Crew therefore had her moved on the 12th. On the 16th she was very anæmic with a hectic temperature, profuse perspiration, and an extremely feeble and rapid pulse There was a very tender pelvic swelling rising nearly to the level of the umbilicus An opinion had been given that the swelling was a large abscess I thought that it was most probably an ovarian tumour with a twisted pedicle, or possibly an inflamed dermoid ovarian tumour If nothing were done the patient's death was certain, so I advised that the abdomen should be opened, although the conditions were most unfavourable for such treatment On operating I found two ovarian tumours, each solid throughout, but they were both so soft that they broke up under the fingers and had to be removed piecemeal There were extensive adhesions and much thickened omentum was cut away The tissue of the broad ligaments was fairly firm where I tied them After the operation the patient passed through a period of extreme feebleness, but I was able to send her a good nurse and under Mr Crew's guidance a gradual improvement took place. The temperature was normal 12 days after the operation and the strength very slowly increased till November when she began to lose ground I saw her on Nov 17th She then had a swelling in the right side of the pelvis which was very difficult to define on account of great intestinal distension The breathing was rapid and there was a slightly impaired percussion note over the base of the left lung No further symptoms developed and the patient died on the 24th There was no post-mortem examination The tumours were not examined microscopically, but I have no doubt that they were malignant and that infection had already passed beyond their margins before I operated

CASE 5 —On Oct 14th, 1892, I removed a multilocular ovarian tumour from a woman 60 years of age The tumour contained much solid tissue and was firmly adherent to the anterior abdominal wall I saw this patient eight months later and she was then dying with large masses of hard growth in her liver

CASE 6 —On March 1st, 1892, I removed a tumour [3] which had every appearance of a simple ovarian cyst and contained no solid tissue except the cyst wall This tumour was not adherent anywhere. The patient had also malignant disease

[1] THE LANCET July 18th, 1891 p 113.
[2] Twenty-six cases in which an abdominal section has been performed a second time Case No 7 Transactions of the Medical Society vol. xx.
[3] THE LANCET Sept. 8th, 1894 p. 573.

the head of the pancreas Her father's sister had died of cancer

CASE 7—Early in June, 1893, a patient was admitted under my care into the Samaritan Free Hospital for Women and Children with an ovarian tumour She had been tapped a month before I saw her and again three weeks later I arranged to operate on June 6th The tumour refilled very rapidly and on June 4th and 5th the patient vomited frequently and could take little food The pulse which had been of good character and beating 84 to the minute rapidly rose to 120 and became very weak There was no rise of temperature The patient was so feeble that on the 6th I aspirated the tumour instead of operating An immediate improvement followed, the pulse falling to 90 on the same day and the highest temperature after the tapping being 99 2 F in the vagina The patient seemed quite well and I decided to perform ovariotomy on June 13th She was kept in bed and on the 10th she wrote several letters of a very cheerful tone. In the afternoon whilst reading a novel she was suddenly seized with pain in the chest and difficulty of breathing and she died within a quarter of an hour There was much solid matter in the tumour which was firmly adherent to the anterior abdominal wall and there were two nodules of cancer in the liver

CASE 8—On May 19th, 1896, I removed an ovarian cystoma from a woman aged 37 years There were considerable adhesions and there was much solid matter in the tumour Three months later (in August) I saw this patient with large masses of growth in the upper part of the abdomen She died in November of the same year

CASE 9—On Oct 9th, 1897, I removed two semi solid ovarian tumours from a woman, 53 years old In the following August she had a recurrence in the upper abdomen and she died from obstruction of the intestines in October, 1893.

CASE 10—On Nov 4th, 1878, Mr Knowsley Thornton removed an ovarian tumour from a woman 49 years of age It consisted mainly of two cysts with a very thick septum In one of the cysts there were "some small secondary masses sprouting up from the lining membrane" 19 years later (on July 24th 1897) I removed a tumour of the left breast which was shown to be an ordinary carcinoma by microscopic examination On May 8th, 1899, this patient had no recurrence and she said that her general health was better than it had been before the removal of the breast

CASE 11—On May 5th, 1899, I saw a patient with a tumour of the breast which clinically was a typical cancer Mr Knowsley Thornton had performed a double ovariotomy in 1880 I advised removal of the breast but I do not know the subsequent history

CASE 12.—On Feb 8th, 1893 I removed from a woman, aged 39 years, a tumour of the left ovary which was not adherent and which did not appear to show any signs of malignancy Six years later (on March 10th, 1899) I removed a very adherent semi solid tumour of the right ovary from the same patient This was shown by microscopic examination to be a soft glandular-celled carcinoma The vermiform appendix was very much swollen and hypertrophied, and so ragged after it was separated from the tumour that I removed this also The patient died and no secondary deposits were found This patient had suffered from much difficulty with the bowels for a long time after her first operation due to adhesions about the colon which were found when the abdomen was reopened She got better of this and married She suffered from severe pelvic pains for fifteen months before the second operation and would not permit her medical attendant to examine her till she was compelled to do so by her serious condition

CASE 13—On Nov 1st, 1897, I performed double ovariotomy on a patient, aged 44 years There were already secondary growths in the peritoneum of the abdominal wall and in the omentum The patient died with hard masses in the abdomen on Nov 16th 1898

There is another way in which ovarian tumours are malignant and that is by direct extension of growth into neighbouring tissues

CASE 14—On March 22nd 1898 I cut down on a very nodular ovarian tumour which was firmly fixed in the pelvis It was held down by an enormously hypertrophied broad ligament which was tightly stretched across the upper surface of the growth. I divided this and shelled out the tumour The rectum was opened in doing so The patient died and it was found that the new tissue had infiltrated the wall of the bowel Under the microscope the tumour was an adeno-carcinoma

CASE 15—On Feb 4th 1898, I began an operation which I thought would be a fairly simple ovariotomy The tumour, which was ovarian had a very broad base on the left side and there was a smaller cyst of the right ovary which had also a very broad base I had to divide the tissues through new growth in removing these tumours I could have gone more away by taking the uterus also and by this means perhaps all the primary growths might have been eradicated but there also existed sub-peritoneal deposits quite separate from the ovarian tumours and uterus and I therefore did not think it right to do more than the double ovariotomy The patient recovered from the operation but died about six months later

CASE 16—I operated on Jan 14th, 1895, in another case in which there were two ovarian tumours That on the left was closely incorporated with the uterus and deeply buried in the broad ligament but seemed otherwise free The right tumour was also deeply buried in the broad ligament and there were many adhesions on this side A coil of intestine was adherent to and firmly stretched over the front of the tumour, the adhesions to it being thick and fleshy I began to separate this coil, and in doing so exposed a piece of intestine into which a hard mass was growing from the tumour This could not have been separated without a resection of the gut, and as there were many extensive adhesions behind and probably other resections would have been required I did not think it justifiable to persevere in removing the growth The patient recovered from the operation I have not been able to trace her subsequent history

Such cases as this last one never, so far as I am aware, get into the statistics of ovariotomy, but these exploratory operations on ovarian tumours are very important whether from a scientific point of view or simply as a guide to the risk run by a patient who is told that she has an ovarian cystoma The omission of such cases as this and the custom of putting the incomplete cases in separate lists or omitting them also from statistics of ovariotomy reduce the mortality of the operation as sometimes published much below the average risks run by a patient with an ovarian neoplasm

There is another and still more difficult side to the question of malignancy in ovarian tumours There can, I think, be no doubt that a complete and early removal of a cancerous growth—for instance, a scirrhus of the breast—does sometimes effect a permanent cure There is no organ which can be more completely removed than an ovary which has developed a tumour and has a long pedicle but has not formed any adhesions, and very many ovarian tumours have sufficiently long attachments to allow of their complete extirpation Under such circumstances it would not be remarkable if a tumour should be structurally and essentially malignant and yet should not return after removal

It is sometimes said that an ovarian tumour arises simply from a dilatation of the Graafian follicles In a few cases this may be so and in others the appearances might be considered as due to a dilatation of follicles together with a hypertrophy of the cyst walls But in a large number of ovarian tumours there is an obvious development of new tissue which is of an adenomatous or papillomatous type I believe it is quite hopeless to attempt to decide definitely from the naked-eye appearances whether a tumour of the ovary is malignant or not Under the microscope adenomatous new growth is frequently found and this does not seem to tend to spread beyond the ovary or to recur when removed. In describing the structure of adeno-carcinoma Mr Morrant Baker and Mr Bowlby[4] state that in these tumours the tissues may be found arranged "after the manner of a simple tubular gland" and also "after the manner of a scirrhous cancer" They add that "between the latter typical carcinomatous structure and the adenomatous growth all intermediate steps may be readily traced" In his book on Tumours Mr Bland Sutton[5] says that "cancer is best described as malignant adenoma" From the foregoing it seems to me that in the ovary there is no absolutely definite separation possible at present between innocent and malignant tumours, whether they are looked at from the standpoint of the surgeon or from that of the microscopist I have for a short time endeavoured to get a report on the microscopic characters of every tumour which I have operated on,

[4] Heath's Dictionary of Surgery p. 226.
[5] Tumours, Innocent and Malignant, p. 87

that the disease is a chronic "infective granuloma" quite distinct from syphilis and tuberculosis, presenting certain histological peculiarities recalling the structure of framboesia (yaws) but differing from this disease in its clinical course and general anatomical features and distribution There can be no doubt that the disease described by Lieutenant-Colonel Maitland and Surgeon Colonel K Macleod in India is identical with the "groin ulceration" described by Dr Conyers and Dr Daniels in British Guiana

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[3] THE LANCET Sept. 8th, 1894 p. 573.

and I hope that in this way interesting information may be obtained I feel sure that every tumour should be examined The case above recorded of an apparently simple ovarian tumour and cancer of the head of the pancreas would seem to indicate that even the most innocent looking tumours of the ovary may be associated with cancerous formations I do not discuss the question of the possibility that the ovarian tumour and the cancer may be independent phenomena occurring coincidently The points which I wish to emphasise are that ovarian tumours are malignant in a considerable number of cases and that the gradations from innocent to malignant tumours are so insensible that it is not always easy, and perhaps not always possible, to separate them definitely

A consideration of the foregoing cases leads to one conclusion so obvious that it might almost be considered unnecessary to state it—viz, that the removal of an ovarian tumour should be advised whenever its existence is diagnosed This is undoubtedly the proper course to pursue and yet I sometimes see cases in which the existence of an ovarian tumour has been recognised for months or years and operation has been delayed until urgent symptoms have arisen The dangers of the formation of adhesions, of twisting of the pedicle, of the occurrence of pregnancy, of the development of suppuration, &c, should urge the surgeon to immediate action But of all the arguments in favour of early operation the possibility that the tumour may be malignant, or that it may become malignant, seems to me to be the most forcible and urgent and at the same time the least considered

Portman street W

ON THE DANGER OF HIGH ALTITUDES FOR PATIENTS AFFECTED WITH ARTERIO-SCLEROSIS

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WE are living in days when the struggle of life and therefore the strain on our nerve power grow more and more intense To counteract these detrimental conditions changes of scene and air at seaside and Alpine health resorts have to play their part and no one better than the weary practitioner can estimate the value of even a couple of days' rest thus indicated as a necessity to prevent a breakdown But the practice of patients going up to Alpine heights without medical advice has its grave dangers which year by year come more clearly to my view and into which a long practice at Alpine health resorts has given me a good insight The public are careless, almost reckless, in this matter, they often disregard judicious medical advice, with the result that serious or even irreparable damage may be done, and sometimes death ensues—a catastrophe easy to be predicted by a careful family physician

The public, and sometimes the inexperienced physician—inexperienced not in general therapeutics but in the physiological effects of altitude on a weak heart—make light of a danger they cannot understand But if an altitude of from 4000 to 5000 feet above the sea level puts a certain amount of strain on a normal heart and by a rise of the blood pressure indirectly also on the small peripheral arteries, must not this action be multiplied in the case of a heart suffering from even an early stage of myocarditis or in the case of arteries with thickened or even calcified walls?

It is especially the rapidity of the change from one altitude to another with differences of from 3000 to 4000 feet which must be considered There is a call made on the contractibility of the small arteries on the one hand and on the amount of muscular force of the heart on the other hand, and if the structures in question cannot respond to this call rupture of an artery or dilatation of the heart may ensue In the case of a normal condition of the circulatory organs little harm is done beyond some transient discomfort, such as dizziness buzzing in the ears, palpitation, general malaise, and this often only in the case of people totally unaccustomed to high altitudes For such it is desirable to take the high altitude by degrees in two or three stages, say first stage 1500 feet, second stage from 2500 to 3000 feet, and third stage from 4000 to 6000 feet, with a stay of one or two days at the intermediate places The stay at the health resort will be shortened, it is true, but the patient will derive more benefit On the return journey one short stay at one intermediate place will suffice Even a fairly strong heart will not stand an overstrain in the first days spent at a high altitude A Dutch lady, about 40 years of age, who had spent a lifetime in the lowlands, came directly up to Adelboden (altitude 4600 feet) After two days she went on an excursion with a party up to an Alp 7000 feet high, making the ascent quite slowly in four hours Sudden heart syncope ensued, which lasted the best part of an hour, though I chanced to be near and could give assistance, which was urgently needed The patient recovered, but derived no benefit from a fortnight's stay, and had to return to the low ground the worse for her trip and her inconsiderate enterprise

Patients between the ages of 45 and 70 years who are the subjects of arterio sclerosis can often stand altitudes of 4000 feet and higher, this depends on the degree of the sclerotic process and especially on the localisation, though patients in advanced stages all do better at altitudes of not over 3000 feet, and the reason is fairly simple Take Engelberg, for instance, which corresponds to this height, it is obvious that the patient will want to go for walks and that not only on level paths He will soon get to altitudes of from 4000 to 5000 feet, even if warned to keep from climbing, sent to a place already 4000 feet high he will take walks to 5000 and 6000 feet and damage may ensue, for if company one cannot always choose the pace one wishes have had patients with arterio sclerosis coming year after year to Adelboden (4600 feet) and only after four or five years symptoms would ensue, and I was obliged, not actually send the patients away, but to confine them to the low walks In a couple of years the same patients will have choose an altitude not above 3000 feet if they are to derive benefit The question must in each case be answered separately and only general rules can be laid down Patients with arterio sclerosis should not attempt a residence at a high altitude without medical advice The family medical attendant is the best judge of the possibility danger, but sometimes nothing short of a trial will decide and the patient must be put under the care of a medical man at the health resort in question

In any case the patient should take medical advice symptoms show themselves, such as sleeplessness, dyspepsia giddiness, buzzing in the ears, palpitation, paræsthesia shortness of breath, or definite slight angina pectoris I have to decide the question in Zurich the altitude of the place (1400 feet) comes to my assistance and by letting the patient ascend the hills around up to 3000 feet, combined with an examination of the blood pressure by means of the Riva Rocci sphygmomanometer, I can arrive at a safe opinion on the advisability of a stay above an altitude of 3000 feet Rapid ascents to a high altitude are very injurious patients with arterio sclerosis and the mountain railways to 7000 feet and 10,000 feet are positively dangerous to unsuspecting public, for many persons between the ages 55 and 70 years consider themselves to be hale and healthy and are quite unconscious of having advanced arterio sclerosis and perchance contracted kidneys An American gentleman, aged 58 years, was under my care for slight symptoms of angina pectoris pointing to sclerosis of the coronary arteries A two-months' course of treatment Zurich with massage, baths, and proper exercise and diet did away with all the symptoms I saw him by chance some months later "My son is going to St Moritz (6000 feet) for the summer," said he, "may I go with him?" "Most certainly not," was my answer The patient then consulted a professor who allowed him to go Circumstances, however took him for the summer to Sachseln, which is situated an altitude of only 2000 feet, and he spent a good summer But he must needs go up the Pilatus by rail (7000 feet) relying on the professor's permission, and the result was disastrous, for he almost died from a violent attack angina pectoris on the night of his return from the Pilatus and vowed on his return to Zurich to keep under 3000 feet in future.

I may here mention that bad results in the shape heart collapse, angina pectoris, cardiac asthma, and last not least, apoplexy, often occur only on the return the lowlands and that patients with cirrhotic kidneys are the greatest danger In the case of apoplexy it generally the combined influence of a few things slight

A Mirror

OF

HOSPITAL PRACTICE,

BRITISH AND FOREIGN

[illegible]

ST THOMAS'S HOSPITAL.

A CASE OF IRREDUCIBLE SCROTAL HERNIA ([illegible] MAN) CONTAINING THE APPENDIX VERMIFORMIS OPERATION FOR RADICAL CURE.

(Under the care of Mr W H Battle.)

In the Mirror of Hospital Practice on May [illegible] we were able to present two cases of the rare [illegible] femoral hernia in which the vermiform appendix was the sole occupant of the sac. The case recorded below is an instance of an appendix occurring in an inguinal hernia alone except for a mass of omentum with which it was closely connected. In both femoral and inguinal hernia the vermiform appendix is usually accompanied by the caecum or other portions of bowel, and the rarity of this and the other cases consists in the fact that the appendix was the sole occupant of the sac.

A man aged 73 years was admitted into St Thomas's Hospital on Oct 3rd, 1897, with an irreducible scrotal hernia. He had had a rupture on the right side for 16 years and had worn a double truss, although there was no evidence of rupture on the other side. Six weeks before admission he had fallen down and ever since had had a swelling in the right scrotum. This swelling was evidently omental without impulse and irreducible. It was very hard, especially in the lower part, and below this was a collection of fluid. No improvement followed rest in bed and it was necessary for a time to pass a catheter three times a day to relieve retention of urine. As there was no improvement in the hernia and his general condition was good in spite of his age it was decided to perform an operation for radical cure.

At this operation on Nov 24th the sac was found to be occupied by adherent omentum below which was the collection of fluid forming a hydrocele of the hernial sac. During the process of division of the omentum the appendix was found to be adherent at its extremity in the thickened omentum [illegible] he was taken [illegible] for three days and he was [illegible] four weeks. A year later he had an attack of retention of urine and was detained in a hospital for [illegible] days, a few months after this he again had retention of urine. He [illegible] the army served in India and had malaria, but no further attack of retention of urine occurred until 18[illegible] when he [illegible] on the spree,' again [illegible] retention of urine as well as contracting typhoid fever. There was an indefinite history of gonorrhoea and from that time repeated attacks of retention of urine had taken place together with difficulty of defecation which was always relieved by the long tube and was on some occasions accompanied by persistent vomiting. In 1897 in South Africa the patient struck his abdomen against the tail of a cart and immediately following this had an attack similar to the foregoing. At Christmas last he was again in hospital with another and worse attack of retention of urine, intestinal obstruction, and vomiting. He stated that between the attacks he was in perfect health and worked as a set maker on the tramways. On admission to hospital in his last illness a No 9 gum elastic catheter without stylet was passed, urine was drawn off and no evidence of any constriction was found. An enema and five grains of calomel had no effect and the catheter had to be used frequently for two days. The long tube was also used at intervals and always brought away fæces and flatus. After this till the death of the patient (a period of three and a half days) he passed urine normally which was found to be free from blood, pus, sugar, and albumin, was acid in reaction, and contained no trace of indican. The abdomen was tense and tender, without marked points of pain or visible peristalsis, there was slight dulness in the flanks. The liver dulness was normal in area but displaced upwards. Marked tympanites was present. Vomiting began three days after the patient's admission to the

In one case the external muscles which are stretched in drawing the eyes into line are thin and narrow, yielding readily, in the other they are broad, thick, and tendinous, offering much greater resistance, so the amount of deviation or anatomical defect does not determine the stress or strain If this evolution of the optic axis was complete there would be no eye strain and the energy now required to sustain it could be utilised in performing other functions more perfectly, thus adding comfort and years to life How much this strain is, or how much life is shortened and our peace and happiness are disturbed by it, is impossible to calculate, but it must be great from the fact that the nerve centres of vision are so extensive—in fact they are many times greater in area than those which furnish energy for our legs, and the legs may use more than a million foot-pounds of energy in a day

ON THE EFFECTS OF PRIMULA OBCONICA ON THE SKIN

BY ROBERT KIRK, M D EDIN, F F P S GLASG,
PHYSICIAN TO THE DISPENSARY FOR DISEASES OF WOMEN, GLASGOW WESTERN INFIRMARY.

IN THE LANCET of March 4th, 1899, I recorded a case of myxœdema in which the irritant principle of primula obconica was suspected of having given rise to severe stomatitis and an acute eczematous eruption on the skin Having now made a few experiments with this plant and having found the results of more interest than I could have anticipated I here propose briefly to notice them

I first of all began with an experiment on myself by rubbing a small part of the leaf of a primula on the inner aspect of the forearm for a few minutes No effect ensuing I repeated the process three or four days afterwards, employing more vigorous and prolonged friction This still remaining without result I rubbed the leaf against the skin on a third occasion by means of a flat bottle containing hot water so as to make sure of breaking up the glandular hairs in which the irritant has been supposed to reside and to increase its effect by the heat if it were a volatile body like toxicodendric acid Still the result was *nil* Becoming now more confident I ventured to apply the leaf on several patients by gentle rubbing but without any result in a single instance In the course of these experiments I had a visit from the myxœdematous patient whose case was recorded in my former paper and in her presence I rubbed a part of the leaf several inches square against the skin of my forearm for 10 minutes by means of the hot-water bottle as above described She looked on with astonishment, but said that she would try it once more to convince me She then took a small part of a primula leaf barely an inch square and with a gloved finger of her right hand rubbed it gently on the inner aspect of her left forearm for not more than a few seconds and then did the same with a few blossoms of the plant on a spot at a little distance remarking that she thought that would do I should here state that only two days before she had recommenced taking thyroid tabloids after an interval of several weeks during which the use of them had been left off and at the end of which she had swollen perceptibly Next morning, feeling no effect on myself, I thought no more of the matter until I received a visit from the lady in the evening I was now surprised to learn that she had not slept since two o'clock in the morning on account of a hot and tingling sensation in the sites of the application and I could scarcely believe the evidence of my senses when I saw that these were the seat of redness and inflammation, this being most marked on the part to which the leaf had been applied, where one border was distinctly raised above the surrounding skin I applied some belladonna ointment, but the smarting getting worse on the same evening she washed it off, thinking it was doing harm On the next day I found that the inflammation had subsided a little, but on the following afternoon a crop of vesicles appeared on the site where the blossoms had been applied, although the inflammatory symptoms had throughout been least pronounced there Some of the vesicles had coalesced and it appeared that if the application had been more prolonged the result would have been a single bulla over the entire area I punctured some of the vesicles, when a little thin serum exuded and flowed freely over the arm I left the patient in the belief that the effects were at an end, but fortunately, although she had not sent for me, I chanced to call upon her a week afterwards when another surprise was in store for me Both areas were now raw and emitting copiously at various points a thin, pale, watery serum, which showed no tendency to coagulate She stated that the site of application of the primula blossoms had never ceased to discharge since I had punctured it and that the other surface had risen in blisters two days or so afterwards and had broken and become ulcerated as I now saw it Both surfaces were itchy and irritable, and she said that she had found the application of very hot water give her more relief than anything else The parts healed up a few days later and the patient was positive that this had been mainly due to the applications of hot water which perhaps had tended to coagulate the proteids in the effused serum They were now covered by a pale brown epidermis resembling a scab, which was interspersed here and there with silvery streaks of whitened scales

In the course of these observations I had continued experiments upon myself, being convinced that the difference between this patient and other individuals could be only one of degree Accordingly I next scratched my skin gently as in the operation of vaccination and rubbed a part of the leaf of a primula firmly on by means of a spatula for five minutes and as no effect appeared in two days I repeated the process with several blossoms on the same spot but without refreshening it This remaining equally without effect I finally increased the raw area by scratching round its circumference and after rubbing on the flowers as before retained them in position overnight by two strips of adhesive plaster arranged crosswise On removing these next morning the surface beneath was pale, no doubt from pressure The same evening I was gratified to find some appearance of inflammation with a sense of heat and itching and next day a few small vesicles actually made their appearance. On puncturing these some serum escaped but not more than a drop or two and it was very different in character from that in the case of the patient whose symptoms I have described, for it was slightly yellowish, viscid, and highly coagulable. On applying some cotton wool and removing it a few hours afterwards I found some fibres of it sticking to the surface which was now practically healed A scab or two now formed and did not drop off till the tenth day and, what is more interesting, a red areola developed which was at first of a punctate appearance, but gradually became uniform This continued to spread till the ninth or tenth day and was always itchy, especially at night It was most marked at parts where it showed most tendency to spread, but was never very severe, so that it was not difficult to resist any desire to scratch There never was any induration or any elevation of the surface and no constitutional effects were manifested in either of the two cases I may add that one evening when my arm was itching and I thought the effects had reached a climax, I applied thyroid extract over it with the effect of obtaining almost complete relief after a few minutes' smarting and some considerations lead me to suppose that it would have been a good application to the ulcerated surface in the myxœdematous patient.

A further observation remains to be stated In my earliest experiments I had one evening applied part of a primula leaf over the pit of the stomach and this also seemed to have no effect, but 10 days afterwards my attention was called to the part by a feeling of tenderness and itching and on inspection it was found to be reddened It continued red and itchy for two weeks afterwards Besides this two reddish and itchy spots appeared on the arm not far from the site of application there, to which the irritant had evidently been carried by the movements of the investing sleeve of flannel It now seemed to me certain that it could not be a chemical compound which had produced these effects on myself and singled out a special constitutional state in such an extraordinary manner as I had just witnessed. Moreover, in the course of the inquiry I had twice made a cold infusion of both the leaves and the blossoms, and found that neither of them yielded to water any free acid whatever, at least any that could be detected by test paper I could hardly resist the conviction that these effects could only be explained by the action of some germ or micro-organism derived from the plant and I ventured to express this suspicion to two of the pathologists of the Glasgow Western Infirmary to whom I showed my

hospital, it was very distressing and continued to the end The colour of the vomited material changed from green to brown, there was never any fæcal smell and the vomiting could not be stopped The tongue from start to finish was moist and clean and there was no odour from the breath or sordes Two days before death hiccough developed The pulse varied from 60 to 100 and was always strong and of high tension. The temperature gradually rose till the third day when it reached 100° F and afterwards gradually fell to 96 2° on the seventh day and never again rose to normal The patient's aspect was clear and singularly unlike that of an intestinal case He was able to move about, was quite clear in his mind, and refused all operative interference, saying that he had always got over similar attacks before On the evening of the ninth day his pulse suddenly failed and one hour before death he had a convulsive seizure from which he recovered and passed gradually into a comatose condition

Necropsy —At the post-mortem examination it was found that the abdominal cavity was full of urine, the intestines being congested, especially the sigmoid flexure and the last 10 inches of the ileum The appendix was perfectly healthy and no constriction of any kind was found throughout the entire length of the alimentary canal On the fundus of the bladder a perforation was found in the centre of a cicatrix over half an inch in thickness with a second old depressed cicatrix on the mucous surface of the bladder The aperture had been closed by an adhesion to the sigmoid flexure, as was evidenced by a few remaining adhesions and the corresponding marks on both bladder and gut The remainder of the bladder was quite healthy

Remarks by Dr JOYNT *and* Dr GREEN —The above case is of interest owing to the difficulty of diagnosis Attention was directed mainly to the symptoms of obstruction which, however, was never absolute, and as the patient had been able to take or retain only a small quantity of fluid and had passed unaided a reasonable quantity of urine no estimation was made of the total quantity of urine which was passed daily The nature of the vomited material and the patient's aspect and liveliness were not in keeping with anything but a very chronic condition Undoubtedly the only correct surgical procedure would have been an early laparotomy, but this, unfortunately, was refused As to the cause of the perforation which was in the centre of an old cicatrix it would be hard to give a definite opinion The patient had met with two severe abdominal injuries either of which might have caused intra-peritoneal rupture of the bladder, the wound being subsequently closed by adhesion of the sigmoid flexure Beyond this there was no other sign of old inflammation of the peritoneum which there probably would have been had there been extensive leakage of urine The patient was on three separate occasions sounded for stone in various hospitals, so that his symptoms must at some time have pointed to calculus, none, however, was found nor was any operation undertaken, and it is most improbable that the bladder was perforated by the injudicious use of instruments The difficulty of defecation can be explained by the kink in the sigmoid flexure Possibly over distension of the bladder may have caused the adhesion closing the aperture to give way

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE

A CASE OF ANKYLOSIS OF THE RIGHT TEMPORO-MAXILLARY ARTICULATION, EXCISION OF THE RIGHT CONDYLE, RECOVERY

(Under the care of Mr FREDERICK PAGE)

FIXATION of the lower jaw can be treated either by excision of the condyle or by Esmarch's operation of removal of a wedge of bone from the body of the mandible Esmarch's operation is more applicable to cases where the fixation is due to cicatricial contraction [1] Resection of the condyle for bony ankylosis was first performed by Gross of Philadelphia in 1874, though the condyle had been removed 20 years earlier for osteo arthritis. The operation is far from difficult and the only complication which is likely to follow it is paralysis of the facial nerve

In January, 1898, a young man was sent by Mr R Taylor Manson of Darlington to the Royal Infirmary, Newcastle on Tyne, suffering from inability to open his mouth beyond the extent shown in Fig 1 The fixation was due to ankylosis the result of suppurative inflammation of the

FIG 1

right temporo maxillary articulation and the condition was one of great discomfort and inconvenience The right condyle was excised by a transverse incision when the mouth could at once be fully opened Fig 2 is a reproduction

FIG 2

of a photograph which was taken eight months after the operation and shows the very satisfactory result which this simple operation gives

Remarks by Mr PAGE —I believe that excision of the condyle is by far the best method of treating ankylosis of the temporo-maxillary articulation and this is the third case which I have published of a successful result

[1] Die Behandlung des narbigen Kieferklemme durch Bildung eines künstlichen Gelenkes um Unterkiefer Kiel, 1860

DANGEROUS FEEDING BOTTLES. — An inquest was held at Bath on June 7th respecting the death of an infant, aged six months The mother had taken the child to a medical practitioner and also to the hospital, as she believed the infant had swallowed the regulator on the tube of the feeding bottle Nothing, however, could be discovered, but two days later the child was admitted into the institution suffering from an obstruction of the larynx. Tracheotomy was performed and the regulator was found firmly fixed in the back of the throat A verdict of "Accidental death" was returned

of the other—that is to say, the heart becomes really hypertrophied This leads in some way to increased uptake of fluid in the placenta and so to increased exudation by this twin This increased exudation takes the form of excessive secretion, certainly from the kidneys, probably from the skin, and possibly also from the portion of placenta belonging to the affected fœtus, and the accumulation of these discharges leads rapidly to enormous hydramnion of the same fœtus The diagnosis can often be completely made by observing that the signs of a fœtus are limited to a small portion of the circumference of a hydramniotic cyst The appropriate treatment consists in the induction of premature labour by puncture of the membranes Case 1 — Seventh pregnancy, symptoms beginning at the fourth month, labour induced by puncture of the membranes at five and a half months The larger fœtus was contained in 19 pints of amniotic fluid, with large heart and kidneys and thick umbilical cord with dilated vessels The smaller twin was in a separate amnion with a normal amount of fluid, the umbilical cord was long, thin, and velamentous, common placenta Case 2 —Third pregnancy, symptoms beginning at three and a half months, labour spontaneous at five months, enormous gush of fluid followed by birth of twins contained in their membranes The larger twin was hydramniotic and the smaller one showed marked atrophy of the wall of the left ventricle, common placenta and chorion

Dr HERBERT SPENCER congratulated Dr Wilson on the full account which he had given of this interesting condition With reference to the clinical aspect of the subject he (Dr Spencer) had found that ballottement, impossible to obtain in the dorsal position, could readily be got by placing the patient in the knee elbow position when the fœtus sank to the dependent part of the abdomen and could be readily felt there Adverting to the differential diagnosis between hydramnion and an ovarian tumour he suggested in difficult cases the passing of a bougie He thought that Dr Wilson took somewhat too limited a view of the causation of the hydramnion in these cases It was evident that the theory given by him would not explain cases of hydramnion in cases of single fœtus and according to that theory hydramnion ought to be excessive in cases of acardiac fœtus where the circulation of the two fœtuses was carried on by the heart of one, this, however, was not the case He thought that it was a difficult thing to diagnose hypertrophy of the heart in premature fœtuses, the size of the viscera varying very much in fœtuses of the same size In one of his own cases of acute hydramnion with homologous twins the fœtuses were almost of the same weight (one just over, the other just under, 1 lb 4½ oz) and the hearts appeared to be normal In this case the cord of the hydramniotic fœtus was much twisted near the fœtus and œdematous beyond (the placenta and cords weighed 1 lb 7 oz), the œdema thus produced would, he thought, possibly explain the hydramnion in this case, but he did not see how a hypertrophied heart could explain its occurrence As fluid was found experimentally to exude into the amnion whether injected into the fœtal or natural circulation it was possible that hydramnion might arise from abnormalities in either He agreed with Dr Wilson in regarding the urine as one of the sources of the liquor amnii, if the fœtus did not pass urine into the amnion fœtal hydronephrosis, of which he had seen several examples, would not occur

Dr A ROUTH thought that the question of the etiology of hydramnion would not be established without reference to its occurrence in single ova and he did not think that Dr Wilson's theory would explain many of such cases It did not account for hydramnion occurring in the acardiac twin instead of the hypercardiac, or for the majority of such cases being female and often puny and lacking vitality where the arterial tension must be below normal, or for its frequent occurrence in cases of anencephalus, spina bifida, exomphalos, &c He thought the diagnosis by means of uterine contractions most helpful and if abdominal ballottement was obtained over all parts of the abdomen by putting the patient in the knee chest position on either side it proved not only hydramnion but the absence of any complicating ovarian cyst

Dr GRIFFITH characterised the paper as one of the most valuable contributions to the subject His own observations had led him to the same conclusions up to a certain point, but he was unable to accept as proved the view that the fœtal kidneys were sources of liquor amnii It had never been demonstrated that it was possible for a fœtus to overcome the tension of the liquor amnii and to pass its secretion, if any, into this sac and there was evidence that it could not do so The determination of such minute quantities of urea or similar substances was difficult

Dr WILSON, in reply, emphasised the fact that hydramnion, like dropsy and jaundice, was a symptom which might depend on some one or more of a variety of causes His contribution was intended to deal with one group only of the cases and no attempt had been made to discuss the causes of hydramnion in general The number of facts in favour of the renal origin of at least part of the liquor amnii left little room for doubting the truth of the theory Intermittent contractions of the uterus were important in diagnosis Treatment by rupture of the membranes could only be undertaken when urgent symptoms in the mother demanded it

The following specimens were exhibited —

Mr MALCOLM 1 Macerated Fœtus from Extra Uterine Gestation retained about a year 2 Macerated Fœtus from Extra uterine Gestation retained seven years 3 Multilocular Tumour growing from the front of the Bladder, containing papilloma and not connected with either ovary

Dr STEVENS Drawings of Vaginitis caused by Bacillus Coli Communis

Mr TARGETT A Naegelè Pelvis

Dr GRIFFITH Two Cases of Sarcomatous Disease of the Uterus

Dr WILSON Unioval Twins

Mr ADDINSELL Unusual Thickening of the Endometrium in a Uterus containing Fibroids

OPHTHALMOLOGICAL SOCIETY

Obliteration of a Branch of the Retinal Artery —Recovery of Sight after Temporary Occlusion of the Central Artery — Traumatic Division of both Optic Nerves

AN ordinary meeting of this society was held on June 8th, Mr H R SWANZY, the President, being in the chair

Dr C E BEEVOR and Mr MARCUS GUNN described a case of Obliteration of a Branch of the Retinal Artery following frequent attacks of Temporary Amblyopia. The patient, a man, aged 34 years, had suffered since childhood from temporary attacks of amblyopia lasting a few minutes, and involving especially the right eye, but unattended by headache About nine months ago, after violent exercise, he had an attack in which the blindness of the right eye was followed by loss of the superior half of the visual field of the right which had persisted and part of the periphery of the lower half of that field At present on ophthalmoscopic examination there was atrophy of the lower half of the right disc with shrinking of the branches of the lower half of the arteria centralis retinæ He had had occasional attacks affecting the left eye and in one he temporarily lost the lower half of the field of vision of the left eye There were no other symptoms except that the right knee-jerk was very deficient and very difficult to obtain The case was considered to be an unusual condition of complete obstruction of a retinal artery which had previously been liable to recurrent temporary constriction

Mr J B STORY reported two cases of Recovery of Sight after Partial Occlusion of the Central Artery Case 1 was that of a man, aged about 35 years, who was attacked with blindness of the left eye on Dec 26th, 1898, and was first seen on Jan 5th of this year Externally the eye was normal in appearance, but the pupil did not act to light, vision was reduced to a perception of light The optic disc was hazy, the arteries were threadlike, and there was a slight cherry colour at the macula, as is seen in typical cases of embolism Inhalation of nitrite of amyl produced some redness of the fundus and arterial and venous pulsation could be produced by pressure The patient was apparently healthy and was not rheumatic, his heart was not examined Iodide of potassium was ordered internally, with daily inhalations of amyl nitrite After six days he could count fingers at three metres, small doses of corrosive sublimate were ordered Two weeks after, on Jan 23rd, the pupil was active and vision had become $\frac{6}{60}$, the improvement had begun suddenly four days before On Feb 7th vision had further improved to $\frac{6}{9}$ and on April 18th it was $\frac{6}{6}$, ophthalmoscopically the eye appeared to be normal

of the other—that is to say, the heart becomes really hypertrophied This leads in some way to increased uptake of fluid in the placenta and so to increased exudation by this twin This increased exudation takes the form of excessive secretion, certainly from the kidneys, probably from the skin, and possibly also from the portion of placenta belonging to the affected fœtus, and the accumulation of these discharges leads rapidly to enormous hydramnion of the same fœtus The diagnosis can often be completely made by observing that the signs of a fœtus are limited to a small portion of the circumference of a hydramniotic cyst The appropriate treatment consists in the induction of premature labour by puncture of the membranes Case 1 — Seventh pregnancy, symptoms beginning at the fourth month, labour induced by puncture of the membranes at five and a half months The larger fœtus was contained in 19 pints of amniotic fluid, with large heart and kidneys and thick umbilical cord with dilated vessels The smaller twin was in a separate amnion with a normal amount of fluid, the umbilical cord was long, thin, and velamentous, common placenta Case 2 —Third pregnancy, symptoms beginning at three and a half months, labour spontaneous at five months, enormous gush of fluid followed by birth of twins contained in their membranes The larger twin was hydramniotic and the smaller one showed marked atrophy of the wall of the left ventricle, common placenta and chorion

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except for a faint perivascular line along the inferior retinal artery.—Case 2 was that of a woman, aged 39 years, who was first seen on Feb 20th of this year. The left eye had suddenly become blind a week before, the heart was normal and her health was good. The eye could count fingers at five metres; the pupil was inactive to light, the retinal arteries were reduced to threads. There was some œdema of the retina and the veins were beaded. Thuiline was prescribed. On March 8th there was no change in vision or in ophthalmoscopic appearances. On March 17th the pupil was active and vision was $\frac{1}{5}$. On May 1st vision was $\frac{1}{5}$, the left disc was slightly pale and its edges were slightly blurred, the arteries were small and the veins were normal. Mr Story regarded both cases as examples of partial occlusion of the retinal artery.

The PRESIDENT observed that it was the obscurity of these cases which so greatly increased their interest.—Dr J T THOMPSON suggested that in Mr Story's second case the cause of obstruction might be obliterative arteritis as shown in some cases by Reimar of Zurich. The narrowing of the artery under varying degrees of blood pressure resulted in temporary anæmia of the affected area and finally in permanent collapse or thrombosis of the vessel, with persistent blindness.—Dr JOHNSON TAYLOR referred to a case of a patient with frequent obscuration of vision in the right eye without fundus changes and with perfect vision in the intervals of attack, which he attributed to spasm of the central artery.—Dr ARGYLL ROBERTSON said that the case with temporary obscuration in one eye resembled a condition described by Benson at the International Congress. The loss of knee-jerk on one side gave increased interest to the condition of the pupil reflex.—Mr PRESTLEY SMITH considered that the importance of these temporary attacks of obscuration of vision lay in the probability that at some time it might become permanent, giving particular point to early treatment and guarded prognosis. He cited an instance of a policeman changing from night to day duty and taking two meals with only a short interval falling into a sleep of plethora and awaking blind in both eyes but recovering the sight of one. In some cases, too, after removal of the ovaries a similar condition had ensued. He attributed these to vasomotor changes set up by reflex disturbance. In one case poisoning, anæmia, and arteritis temporary blindness occurred and was probably due to similar changes to those which occasioned migraine in gastric disturbance and anæmia. In migraine temporary paralysis of the third nerve sometimes occurred. He recommended antipyrin as an immediate remedy in the attack and subsequently hot water potations, with alkalies and salicylic acid, as in gouty conditions.—Mr JULER had seen Dr Beevor's case before hearing his opinion and was disposed to attribute the loss of vision to thrombosis following on changes produced by a blow which the patient had received at polo previously attended with bleeding from the ear on the same side.—Mr CANT cited the case of a young girl with attacks of blindness occurring once a week and lasting from 10 to 15 minutes. He saw her at intervals during nine months, only on one occasion did he witness an attack. In the eye affected there was the distinct cherry red spot at the macula, but in the other eye with commencing attack there was no change. The vision returned. Two months ago a large hæmorrhage occurred in the left eye and was clearing up. The general health was good except for defective and painful menstruation.—Mr MARCUS GUNN referring to the first case, said that the obscuration lasted from two to five minutes, recovery being absolute. The condition of the artery was unmistakeable. Argyll Robertson pupil was not present. The condition suggested that of migraine.—Dr BEEVOR, in reply, stated that the condition of the patient suggested locomotor ataxy. The knee jerk was, however not quite absent and the disorder had lasted since the patient was seven years old. Other distinctive signs of ataxy were not present and the pupil was unaffected. A sister of the patient was subject to two kinds of paroxysms—one like her brother's with temporary blindness and the other true migraine. He had never seen migraine cause optic nerve atrophy. In regard to the polo accident in this case he thought that it was too remote, having preceded the attack by three months.

Mr KENNETH SCOTT related a case of Traumatic Division of both Optic Nerves. An Egyptian native, aged 23 years was sent to the Kasr-el-Aini Hospital at Cairo after a attempted suicide. A bullet had entered the right temple, traversed the head, and passed out at the left temple, it had passed from side to side below the base of the skull in a direction downwards and forwards. Both eyeballs were completely protruded and lay on the cheeks, the right one hanging down 19 millimetres and the left one 15 millimetres. Both eyes were dark, discoloured, and flattened; it was obvious that both optic nerves had been torn across and that the globes had been ruptured. The damaged eyes were removed and it was found that both orbits had been traversed by the bullet and the base of the brain had been shattered as there were fragments of bone and brain matter in the right orbit. The patient did not long survive the injury.—Mr J T THOMPSON cited the case of a man who attempted suicide by shooting himself in the temple. The right eye was ruptured and the left was proptosed. He was totally blind, but survived two years.

The following card specimens were exhibited:—

Dr. J TAYLOR THOMPSON: Section of an Eye showing Subconjunctival Dislocation of the Lens.

Mr H. E. JULER: Fundus Changes following Optic Neuritis.

Mr HOLMES SPICER: A case of Spring Catarrh.

BRITISH GYNÆCOLOGICAL SOCIETY.

Decidoma Malignum.—Diseases of the Female Pelvic Organs.

A MEETING of this society was held on June 8th, Dr H. MACNAUGHTON-JONES, President, being in the chair.

Dr F W N HAULTAIN (Edinburgh) showed a specimen and microscopical slides and gave a lantern demonstration of micro-photographs of a case of Decidoma Malignum. Rejecting the view that these cases were to be regarded as examples of sarcoma attacking the pregnant uterus he held the view that the condition was one of chorio-epithelioma.—The PRESIDENT said that the general opinion of continental authorities coincided with that of Dr Haultain, and the differences which were met with were explained as being due to "typical" and "atypical" forms of the disease. This was his own view also, although his opinion was based on extraneous evidence, for he had not met with a case in his own practice.—Dr T W EDMS thought there was grave doubt whether the 91 cases which had been recorded as decidoma malignum could bear close examination. In the last volume of Veit's 'Handbuch der Gynæcologie" the editor expressed the opinion that the chorionic theory was untenable and that the disease was in reality sarcoma modified by the occurrence of pregnancy. Even Dr Haultain himself admitted that the growth presented the broad characteristics of a sarcoma. The only structures in it which were peculiar were the long cords and loops of nucleated protoplasm, the other features might occur in any rapidly growing sarcoma.—Dr HERBERT SNOW thought that decidoma malignum did not possess characters sufficiently different from other growths to warrant a separate nomenclature. Probably some cases described as decidoma malignum were not malignant at all.—Dr WILLIAM DUNCAN deprecated making a special pathology for diseases of the uterus: this practice had kept gynæcology back many times in the past and he hoped that the term 'decidoma malignum' would soon disappear.

Dr MENDES DE LEON (Amsterdam) read a paper on General Disorders Originating in Diseases of the Female Pelvic Organs. After dwelling on some of the reflex symptoms which were found associated with diseases of the uterus and appendages he went on to remark that the varied forms of misery liable to be brought about under the influence of a pathological condition of the sexual organs on the whole constitution of a woman could not be overrated. Nothing could be further from his mind than to insinuate that every ailing woman should be submitted to a gynæcological examination, but in the absence of sufficient cause elsewhere the possibility of pelvic disease should be borne in mind. It was important to remember that anomalies of the pelvic organs, although insignificant [illegible] and [illegible], might still be the cause of serious disturbance to the general health. It was something more than injustice to a woman if they deliberately ignored the influence which such local disease might exert in exciting morbid impulses in the central nervous system and thus through summary diagnosis cause the patient to be branded as hysterical.—In the discussion which followed Dr HAYWOOD SMITH, Dr BURLEIGH-ROBINSON, Mr CHARLES BELL, and the PRESIDENT took part, and Dr MENDES DE LEON replied.

of the other—that is to say, the heart becomes really hypertrophied This leads in some way to increased uptake of fluid in the placenta and so to increased exudation by this twin This increased exudation takes the form of excessive secretion, certainly from the kidneys, probably from the skin, and possibly also from the portion of placenta belonging to the affected fœtus, and the accumulation of these discharges leads rapidly to enormous hydramnion of the same fœtus The diagnosis can often be completely made by observing that the signs of a fœtus are limited to a small portion of the circumference of a hydramniotic cyst The appropriate treatment consists in the induction of premature labour by puncture of the membranes Case 1 — Seventh pregnancy, symptoms beginning at the fourth month, labour induced by puncture of the membranes at five and a half months The larger fœtus was contained in 19 pints of amniotic fluid, with large heart and kidneys and thick umbilical cord with dilated vessels The smaller twin was in a separate amnion with a normal amount of fluid, the umbilical cord was long, thin, and velamentous, common placenta Case 2 —Third pregnancy, symptoms beginning at three and a half months, labour spontaneous at five months, enormous gush of fluid followed by birth of twins contained in their membranes The larger twin was hydramniotic and the smaller one showed marked atrophy of the wall of the left ventricle, common placenta and chorion

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Mr J B STORY reported two cases of Recovery of Sight after Partial Occlusion of the Central Artery Case 1 was that of a man, aged about 35 years, who was attacked with blindness of the left eye on Dec 26th, 1898, and was first seen on Jan 5th of this year Externally the eye was normal in appearance, but the pupil did not act to light, vision was reduced to a perception of light The optic disc was hazy, the arteries were threadlike, and there was a slight cherry colour at the macula, as is seen in typical cases of embolism Inhalation of nitrite of amyl produced some redness of the fundus and arterial and venous pulsation could be produced by pressure The patient was apparently healthy and was not rheumatic, his heart was not examined Iodide of potassium was ordered internally, with daily inhalations of amyl nitrite After six days he could count fingers at three metres, small doses of corrosive sublimate were ordered Two weeks after, on Jan 23rd, the pupil was active and vision had become $\frac{5}{10}$, the improvement had begun suddenly four days before On Feb 7th vision had further improved to $\frac{5}{7}$ and on April 18th it was $\frac{5}{6}$, ophthalmoscopically the eye appeared to be normal

patient presented. In this case Dr Thomson thought that the elevations on the bone were more marked at first and then became less so, not on account of any absorption, but because the surrounding parts of the bone underwent a thickening The same was seen in the natiform crania of syphilitic children where the lenticular shaped bosses gradually disappeared by reason of the filling up of the valleys between, the whole bone becoming thickened and cancellated —Mr CAIRD thought that the section of bone exhibited presented nothing of a specific type, but said that if the patient had lived it might have become denser than any other bone, much as was met with in the case of septic bone diseases.—Mr ALEXIS THOMSON said that one saw similar conditions in bones and specially in the tibia in other bone diseases He objected to the term "syphilitic osteitis"—Dr JAMES replied

KIDDERMINSTER MEDICAL SOCIETY —A meeting of this society was held on May 26th, Mr E H Addenbrooke, President, being in the chair —Mr J Lionel Stretton showed —1 A young woman, aged 21 years, upon whom he had operated 10 weeks previously for Tuberculous Peritonitis She walked about out-of doors and expressed herself quite well, the abdomen appeared to be normal, and she had gained 12 pounds in weight She had been taking creasote in doses increasing by one minim each day and was now taking 60 minims three times a day On several occasions her urine became dark green in colour, but this always disappeared in a day or two without discontinuing the medicine A portion of the omentum was sent to the Clinical Research Association and they reported as follows "This tissue is infiltrated with an abundance of grey and caseous tubercles. The giant cell systems are well developed' 2 The Pyloric End of the Stomach with part of the Duodenum removed from a man, aged 67 years He had suffered from gastric symptoms for some months and had been an in patient the early part of the year, during which time he was thoroughly examined under an anæsthetic with a negative result Although somewhat relieved by treatment his symptoms soon returned when he went out He chiefly complained of severe pain in the stomach which was increased during the night, he stated that he had never had hæmatemesis, but that he vomited at times, though this never occurred while he was in the hospital, and he had lost flesh The abdomen was opened in the middle line above the umbilicus, there was a considerable thickness of fat and the omentum was bulky Tucked up beneath the liver was a large mass of growth involving the pyloric end of the stomach which was bound down by adhesions After separating these it was found that the growth involved the whole circumference of the organ, but the larger portion was on the lesser curvature The whole of the diseased part was excised which involved the removal of one-third of the stomach and one and a half inches of the duodenum The stomach was closed with sutures except the lower angle which was joined to the duodenum with a Murphy's button He bore the operation well and passed a comfortable night, the next day he was quite himself and had rallied from the shock, but at 3 A M the following morning he had a sudden attack of cardiac failure and died in spite of all efforts to revive him. Nothing was found post mortem to account for death the stomach was securely sutured and held water without leakage. The chief points of interest were (1) the slight symptoms, (2) the negative results of abdominal examination due to the thickness of the walls and the position of the growth, and (3) the sudden death Although attributed to cardiac failure there was no evidence of its cause and everything had been done to guard against it — Mr F Oliphant read notes of a case of Pyæmia treated with anti streptococcic serum The man, aged 23 years, was admitted with stiffness and swelling in the left side of the neck which commenced two days previously At first it was regarded as a case of inflammation of the lymphatics, but pyæmic symptoms soon developed On April 17th and three following days he had an injection of serum (10 cubic centimetres) There was not much effect upon his general condition, though the local symptoms were decidedly improved, and he died on the 24th. Mr Oliphant considered that he was benefited by the treatment and if it had been given earlier a favourable result might have been obtained — Mr W Miles read a paper on Adenoid Vegetations in the Naso-pharynx.

WIGAN MEDICAL SOCIETY —A meeting of this society was held on June 8th, Mr C R. Graham occupying the chair in the unavoidable absence of Mr L Cooke (the President) —A vote of condolence was unanimously passed to Mr W Mitchell Roocroft and family on the death of his father, Mr William Roocroft, J P, a former President of the society —It was proposed by Dr Benson and seconded by Mr Monks, and carried with acclammation, that the society tender its hearty congratulations to Sir William Mitchell Banks on the mark of distinction accorded him recently by Her Gracious Majesty the Queen —The Secretary read the following resolution on vaccination which had been received from the honorary secretary of the Medical Institution, Liverpool —

That the members of the Liverpool Medical Institution are of opinion that the Vaccination Act of 1898 was enacted in direct opposition to the findings of the Royal Commission and that the operation of the Act will be prejudicial to the public safety and that its amendment is urgently required.

It was proposed by Dr Benson and seconded by the Honorary Secretary that the society support the resolution of the Liverpool Medical Institution It was then proposed that the letter and resolution lie on the table. An interesting discussion followed, a further amendment being proposed and carried unanimously to the following effect —

That this meeting is of opinion that Parliament should make efficient vaccination compulsory that the sanitary authority should have the carrying out of the Vaccination Act that the cost of vaccination should be a State or Exchequer charge and that private practitioners and public vaccinators should be paid the same fees from the Exchequer funds.

The following members took part in the discussion Dr Benson, Dr Rees, Mr Bradbury Mr Parker, Mr Brady, Mr Wilding, Mr Graham, Mr Monks, and the Honorary Secretary The President's address was postponed till the next meeting

Reviews and Notices of Books.

A Class book of Elementary Practical Physiology By DE BURGH BIRCH, M D, C M, F R.S Edin, Professor of Physiology in the Yorkshire College of the Victoria University London J & A Churchill 1899 Pp 273 Price 6s 6d

THIS work is an expansion of the notes which the author places before the students attending his course of practical physiology in the Yorkshire College and is divided into three sections The first deals with histology, the second with chemistry in so far as it is required in medicine, and the third is devoted to a description of the more simple and fundamental physiological experiments The size of the volume precludes the giving of details of the structure of the several organs, but the names applied to the parts are mentioned to indicate to the student the points for which he must look, as, for example, in the case of the bones, the lamellæ and their disposition, the ground substance lacunæ Haversian spaces and the appearances presented in ossifying cartilage In the preliminary exercises with the microscope the method of employing a warm stage is overlooked, but the mode of measurement of an object is well described A drawing is given of a simple appliance for fixing animal tissues by injection and a considerable number of formulæ for hardening and staining tissues is given, such for example, as Weigert's fibrin stain, Golgi's chromate of silver process and Ramón y Cajal's double impregnation method The various tests for glycoses, saccharoses, and amyloses, and for fats and proteids are fully and satisfactorily, though briefly, described The chapter on Normal and Abnormal Urine is very good The principal apparatus required in physiological experiments are described and illustrated by very good woodcuts and the fundamental experiments of physiology are given

There are several errors which require correction, Hensen being spelt Henson, Engelmann, Englemann, rectus,

EDINBURGH MEDICO-CHIRURGICAL SOCIETY

Exhibition of Cases and Specimens — Congenital Syphilitic Osteitis

THE ninth ordinary meeting of this society was held on June 7th; Dr CRAIG being in the chair.

Mr SHAW M'LAREN showed a boy on whom he had performed Disarticulation at the Hip The lad was a pit-head worker who was caught by the hutches and driven through a narrow opening, subsequently falling a considerable height The accident produced what was really an amputation through the middle of the right thigh The operation was performed 12 hours after the accident Hæmorrhage was completely and most satisfactorily prevented by digital pressure on the abdominal aorta by an assistant The lad was young, however, and as the abdominal walls were thin compression was easily effected At the end of the operation, though very little blood had been lost, the patient was pulseless A pint of saline fluid was then injected into his median basilic vein, and together with enemata of hot coffee (no alcohol was employed) his condition soon improved Parts of the flaps had been badly crushed by the accident and later these sloughed and prevented union by first intention

Mr OATHCART showed a patient after operation for a Perforated Vermiform Appendix with General Peritonitis Recovery after such a state of affairs was infrequent The woman was admitted to the Royal Infirmary five days after the first onset of the symptoms, but as these symptoms were very slight during the first two days it may be said that she was admitted on the third day really Her condition then was very critical, there seemed to be general peritonitis with a localising towards the right side The incision was there fore made to the right of the median line and the appendix was found to have sloughed as far as its junction with the cæcum Very fœtid pus was present as well as a small concretion in the pelvis As each loop of intestines was investigated a pocketful of fœtid fluid escaped As had been recommended, the intestines were then pulled out loop by loop from the wound and thoroughly washed, as was also the abdominal cavity The cæcum was so distended that it required to be punctured As the wound which remained after the sloughing of the appendix was soft and friable it was not sutured but the neighbourhood was packed with gauze No peritonitis ensued subsequently, but pieces of the right rectus muscle sloughed away during the healing process This showed that the peritoneum was much less susceptible to infection than were the other tissues, as the rectus was only once touched by the septic fluid during its escape At present a small valvular sinus remained in the wound and apparently communicated with the bowel, as when coloured fluid was injected it appeared in the motions, though none of the fæces ever escaped

Mr CAIRD exhibited a man who evidently had suffered from Congenital Syphilis At present he possessed a hard sore on the penis, he had a secondary syphilitic rash and was losing his hair The case was apparently one of congenital together with secondary syphilis

Dr SHENNAN exhibited the following specimens —1 Malignant Pustule The specimen was characteristic— sloughy centre and œdematous surroundings, and i logy of section through it the anthrax bacilli could be seen lyi ence to the tissue spaces 2 Sarcoma in the Tip of the Ta that Dr sphenoidal Lobe 3 Calcareous Deposit in cases It did and extending into the Tunicæ The sac in the acardiac twin old man, aged 75 years, and resulte or the majority of such culous deposit 4 Extensive H puny and lacking vitality men was from a woman who st be below normal, or for its freq became uræmic. She s of anencephalus, spina bifida, exomphalus face or limbs ght the diagnosis by means of uterine con woman died helpful and if abdominal ballotte ment was obtai her all parts of the abdomen by putting the patient in the knee chest position on either side it proved not only hydramnion but the absence of any complicating ovarian cyst.

Dr GRIFFITH characterised the paper as one of the most valuable contributions to the subject His own observations had led him to the same conclusions up to a certain point, but he was unable to accept as proved the view that the fœtal kidneys were sources of liquor amnii It had never

Dr ALEXANDER JAMES communicated a paper on a Case of Congenital Syphilitic Osteitis The patient was a lad, aged 18 years His family history was distinctly syphilitic. His mother had a son by her first husband and he seemed to have suffered from a similar disease to the present patient's and died when 13 years of age Of the same family as the patient a boy died when seven weeks old from some unknown cause, next a boy was born with some swelling on his back and he only lived six days, next came a miscarriage at the third month, followed by a son who died 11 weeks later. Two abortions followed and then four children who were alive and healthy Dr. James had noted that in such families great fecundity was the rule As an infant the patient had neither snuffles nor rash When two years old, however, he had keratitis The present illness began when he was nine years of age subsequently to an attack of measles and whooping-cough He then began to suffer from pains in the arms and legs and a swelling (node) at the middle of the right tibia. The latter enlarged and was painful at intervals In 1892 Dr John Thomson saw the patient and found that the lower ends of both humeri were enlarged and that there were localised swellings (nodes) on both tibiæ and on the right scapula Under iodide of potassium the patient improved In 1897, when he was first admitted to the ward, he had great pain in the right leg and there was a diffuse thickening of the right tibia The left tibia was also enlarged. At this time he complained of no arm trouble and again improved under iodides In May, 1898, he first noticed that the index and middle finger of the right hand had become weak and this weakness soon affected all the fingers of that hand For five weeks before admission he had suffered from headaches which were always worse at night Twitchings of the right hand and arm followed On admission he was found to be a badly grown lad of five feet four inches, his muscular development was poor and he was dull and apathetic There was no rise of temperature The right tibia was thickened throughout its length and slightly curved inwards It was also about three quarters of an inch longer than the left, as may also have been the case with the right femur as contrasted with the left There were no special changes in the sensory functions but loss of motion was present in the right forearm and hand His vision was blurred and especially in the left eye, optic neuritis was present The plantar and epigastric reflexes were more marked on the left side but the deep reflexes were all absent The lymphatic glands in either groin were enlarged, as were others also, and the spleen measured seven and a half inches in length by five inches in breadth The arterial walls were thickened and this thickening was especially marked in the veins of the leg, the saphenous vein standing out like a tendon The diagnosis was that of hereditary syphilis Nodes had been present previously but these had disappeared, leaving a diffuse osteitis (local gigantism) There was also a tumour in the left Rolandic area affecting the right hand and arm centre. Under large doses of iodide he improved somewhat but went home and died on Jan 15th, 1899 The post-mortem examination was imperfect but a tumour of the size of a golf ball was found as diagnosed and a disc like portion of the right tibia was removed The latter showed that the tibia consisted of a thin rim of dense bone at the periphery with the interior entirely filled up with cancellated tissue, leaving no medullary cavity Under a higher magnification much and marrow cells were seen to be present in the bone. aftease was evidently one of distinct specific disease. of a m had been formed and had then disappeared The ness of wh were present were rather parasyphilitic than Jan 5th of Still later, however, the hereditary disease appearance, bun the shape of the cerebral gumma Such reduced to a pld such a patient take syphilis afresh? the arteries wentis occurring in syphilis any connexion colour at the mac of osteitis? might be asked This Inhalation of nit an increase in quantity at the of the fundus ant had caused a reversion to an earlier be produced by pn the bone There had also been an healthy and was of the bone. It was said that general examined Iodide from such osteitis and it was true that with daily inhalatio exhibited as such were syphilitic On he could count finger, they found dwarfism as a result of rosive sublimate weion of the bone might have resulted 23rd, the pupil was which produced its increase in thick- improvement had b MSON thought that what Dr James 7th vision had fue merely limited patches of osteitis and was f, ophthalmie also objected to the term "parasyphi- d been no gap in the symptoms which this

plain When experiments were made with a pair of dumb bells weighing five kilogrammes each it was found that more work was accomplished at the altitude of 15,000 feet than at Turin, but this curious result was to be explained partly by the increased practice and partly by the fact that this exercise replaced all the various forms of amusement which the soldiers had at their disposal in Turin It is often believed by Alpine climbers that rarefied air produces an augmentation of strength This is, however, an illusion, for at an altitude of 15 000 feet the diminished resistance to work was obvious to all the members of the party, and the same result was noticed by Whymper at Quito A very interesting phenomenon which is sometimes observable after severe mountain climbing as after other forms of physical exertion is the condition of exaltation In this state the climber is unconscious of his fatigue and considers himself capable of accomplishing much more than he has already done, or he may act as if intoxicated, afterwards having no remembrance of what has taken place During ascents the memory may be weakened, and the author quotes from his own work on "Fatigue" the case of a professor of botany who as he ascended forgot the names of plants well known to him which, however, he recalled in descending The symptom is common and cutaneous sensibility is also diminished Death may result from fatigue and the sad story is related of the death from this cause of the two sons of the professor of anatomy in the University of Pavia which occurred in 1896 at a height of 2100 metres

Perhaps the most interesting portion of the volume is the account of the author's investigations into the etiology of mountain sickness The symptoms are palpitation, faintness, breathlessness, and weakness There may be nausea and vomiting, but the symptoms vary much in different cases It has hitherto been customary to attribute them to fatigue and indigestion, but Professor Mosso will not accept this explanation He points out that aeronauts suffer from it, therefore fatigue is no necessary factor in causing it There are two forms of mountain sickness—the acute and the slow form The acute form shows itself suddenly on entering the rarefied air, the slow form appears later and may be in part the result of other weakening causes The acute form is that which chiefly needed to be studied Paul Bert ascribed all the symptoms of mountain sickness to a lack of oxygen, but oxygen has been used at Mont Blanc and has been found to be quite useless But Paul Bert has pointed out in his work on Barometric Pressure that the carbonic acid in arterial blood diminishes much more rapidly than the oxygen when the barometric pressure diminishes, and Hüfner has shown that oxyhæmoglobin does not begin to dissociate until the pressure has fallen to 238 millimetres so that 9000 metres of altitude would be needed to make any change in oxyhæmoglobin Professor Mosso attributes mountain sickness to a diminution in the amount of carbonic acid in the blood, this lack of carbonic acid he has called "acapnia," from ἀκapνος = without smoke The author made a series of experiments with a pneumatic chamber in which the pressure could be diminished and he found that the phenomena of mountain sickness did not correspond at all to the amount of oxygen present, but that if carbonic acid were present in a normal or excessive amount a higher degree of rarefaction of the air could be endured In one experiment on himself Professor Mosso was able to withstand an air pressure of only 192 millimetres of mercury, this is equal to an altitude of 11,650 metres (38 000 feet) and the inspired air contained 2 1 per cent of carbonic acid

There is, however, another factor in the production of mountain sickness and that is paralysis of the vagus This is shown by a dilatation of the pulmonary capillaries, sometimes accompanied by œdema of the lungs The author promises to publish later the results of his researches on the treatment of mountain sickness and fatigue.

An interesting phenomenon of great altitudes is the slight effect on the mind produced by alcohol, and intoxication is somewhat difficult of attainment This is shown by some investigations by Dr Benedicenti to be due to the fact that the alcohol much more readily passes away by the lungs, and chloroform has a much more transient effect when administered

The book will be very interesting to the medical world but many a non professional reader will find much to entertain him in the account of arduous labour in a lonely spot, described in a tale which is charmingly set forth and which is illustrated by more than 50 excellent photographs The descriptions though as exact as any physiologist can require are written in a manner that any intelligent man can understand The translation by Dr Kiesow is very good, and it is only by a slight indication here and there we can tell that we are not reading the book in the language in which it was originally written There is one fault and that we must mention a work of this importance should be furnished with an index

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The Psychology of Reasoning Based on Experimental Researches in Hypnotism By ALFRED BINET, Director of the Laboratory of Physiological Pyschology in the Sorbonne Translated from the Second French Edition by ADAM G WHYTE, B Sc London Kegan Paul Trench, Trübner, and Co 1899 Pp 191 Price 3s 6d

IN this little volume Dr Alfred Binet, the accomplished Director of the Laboratory of Physiological Psychology in the Sorbonne, gives us an interesting and valuable study of mental processes based partly on individuals in the waking state and partly on subjects under the influence of hypnotism Like everything that Dr Binet writes the subject is stated and expounded lucidly even when the argument is not always convincing At the outset stress is laid on mental processes belonging to the class of *unconscious* reasoning The basis of reasoning is explained and expressed thus "The fundamental element of the mind is the image, reasoning is an organisation of images determined by the properties of the images themselves, and the images have merely to be brought together for them to become organised, and reasoning follows with the inevitable necessity of a reflex" (p 3) This main thesis is skilfully developed in the succeeding pages The process of perception is briefly but clearly expounded and illustrated and concrete examples are given in sufficient numbers to make it interesting The subject of mental images is next taken up and dealt with in detail It is pointed out that this endowment is very variable both for individuals and for races The French as pointed out by Galton, appear to possess this gift "as attested by their talent for organising ceremonies and *fêtes* their aptitude for strategy, and the clearness of their language, *figure-vous* is an expression which is often met with in French" Individuals are distinguished according as to whether visual or auditory images predominate and form the major element in their mental processes, and the special development of the visual element in blindfold chess playing is pointed out While painters are predominantly *visuels*, musicians are mainly *auditifs* Other individuals belong to the *indifferent type* in those who belong to this class no one kind of image is more developed than the others Finally a motor or, as we should call it a kinæsthetic type also is known The special relation of some of these types to the function of speech is discussed It is shown, for example, that Stricker belongs to the "motor' type and Paulhan to the "auditory" type as regards speech, and thus a controversy which has been

rectum, Pacinian, Pacinnian, panniculus adiposus, paniculus adeposus, epith, spith, Kanthack, Kauthack, and so on

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The Practice of Obstetrics By American Authors Edited by CHARLES JEWETT, M D Illustrated with 441 Engravings, 34 of which are in colours, and 22 Coloured Plates 8vo London Henry Kimpton 1899 Pp 770 Price 25s net

THIS volume is described as the work of obstetric teachers and of other experts in the cognate lines on which they have written It is, as such books usually are, of very unequal merit, and while some of the contributions are of great value others by no means reach the same standard of excellence The book is divided into eight parts, dealing respectively with Anatomy, the Physiology and Pathology of Pregnancy, Labour and the Puerperium and Obstetric Surgery The chapter upon Anatomy is good and clear and contains a full account of the anatomy of the contents of the pelvis

In Part II we are inclined to think that the section devoted to the Development of the Ovum is too full and detailed for a work of this kind It is pretty certain to be skipped by the average student, while the practitioner desiring a complete account of the subject would do better to refer to a work dealing especially with embryology

The rest of the chapters upon the Physiology of Pregnancy contain all the essential details The anatomical description of the bony pelvis is good and we are glad to see that the author gives the measurements both in inches and in centimetres The mechanism of labour is but poorly described and no account appears to have been taken of the valuable results obtained by the study of frozen sections in this connexion The description of the mechanism of the third stage of labour is no better and a student reading the short paragraph devoted to this important subject would quite fail to get any clear idea of the various views held at the present day as to how the separation of the placenta really occurs In the management of normal labour the use of antiseptics is fully discussed and due stress is laid both in this chapter and in that upon Puerperal Infection upon the great importance of abdominal palpation and the avoidance of unnecessary vaginal examinations Walcher's position is illustrated by a full page photograph of a patient in that posture and is recommended in several places in the book, but no mention is made of the fact that the increase in the conjugate diameter is not believed in by everyone and is, indeed, denied by some obstetricians of note The chapter upon the Care and Management of the New born Child contains a very good account of infant feeding upon a scientific basis The sections upon the Anomalies and Diseases of the Fœtus, consisting as they do of little more than a catalogue of names, are of little value, although illustrated by some good photographs from Hirst and Piersol's Atlas

We entirely agree with the recommendation that a sharp and not a blunt curette should be used in the treatment of cases of incomplete abortion With a sharp instrument the amount of force employed can be carefully graduated and the decidua can be more certainly and just as safely removed as with the blunt curette The chapter upon Puerperal Infection is from the pen of Dr Whitridge Williams As might be anticipated the bacteriological and pathological aspects of the subject are very fully considered and a very interesting review is given of the work done upon the question of the presence or absence of pathogenic organisms in the vagina and the possibility of auto-infection Dr Williams draws attention to the important difference between cases of septic and putrid endometritis and the uselessness of local treatment in cases of acute septicæmia with few or no local changes He does not regard with favour the operation of hysterectomy in the early stages of puerperal infection and, as he points out, if the operation be done sufficiently early a large number of uteri will be removed unnecessarily, while if it be put off until other organs are involved it will in the majority of cases prove useless. This is one of the best accounts of puerperal infection which has so far been written and will well repay perusal A slight typographical error is to be noted on pp 571 and 572, the descriptions of Figs 353 and 354 having been transposed The best part of the chapter upon Obstetric Surgery is the account of Version and of Symphysiotomy The illustrations are mainly derived from other sources, so that many of them are familiar, but a good choice has been made The book is one which will be found very useful for purposes of reference and does credit to the editor and the gentlemen who have contributed to its production

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Life of Man on the High Alps By ANGELO MOSSO Translated from the Second Edition of the Italian by E LOUGH KIESOW 1898 London T Fisher Unwin Pp 342 Price 21s

THE barometric conditions under which the vast majority of the human race live and work are on the whole so very uniform that much interest naturally attaches to an investigation into the differences resulting from any considerable variation in the atmospheric pressure Professor Angelo Mosso has devoted much time and care to the question as to the effect on the human body of greatly reduced pressures and his results are presented in this volume Early in 1894 the Regina Margherita hut was completed on the summit of Monte Rosa, at a height of 4560 metres (15,000 feet), and the author decided to undertake a series of researches into the effects on human beings produced by this altitude By the permission of the Italian Minister for War he was permitted to take with him 10 men of the Alpine regiment under the command of an army surgeon A number of soldiers at once volunteered and some preliminary investigations were undertaken with the object of ascertaining the physiological conditions of the men under ordinary circumstances It is so very easy to confuse the effects of fatigue with those of lessened barometric pressure that Professor Mosso took special care to avoid this error In addition to the author and the soldiers the party contained the author's brother, Ugolino Mosso, Professor of Pharmacology at the University of Genoa, Dr Vittorio Abelli, an army surgeon, and a medical student, Signor Beno Bizzozero, to whom are owing most of the numerous photographs which adorn the book Unfortunately he died a year after the expedition returned

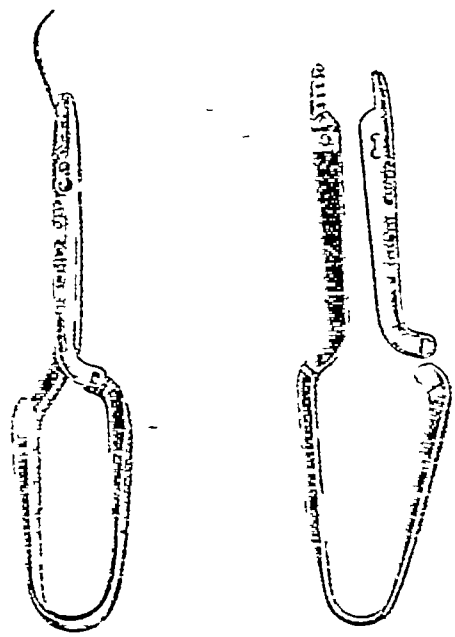
It has always hitherto been stated that at great altitudes respiration is more rapid and more profound, but this error is due to the long duration of the disturbing influence of the ascent, for in persons in complete repose dwelling at great heights the breathing has been found by the author not to increase either in frequency or in depth, but even to diminish, and a careful measurement of the quantity of air expired showed that less air was inhaled at these great altitudes The effect on the heart and circulation is but slight unless the change from a low to a great altitude has been made rapidly, in that case there may be a considerable increase in the number of pulsations of the heart and the blood pressure is diminished In order to register the mechanical work of the muscles the author devised a machine which he called an "ergograph", it registered the contractions of the middle finger which were executed rhythmically following the movements of a pendulum It was found that on Monte Rosa the force of the muscles was slightly diminished, but that the total amount of the work accomplished was only slightly less than in the

Solubility 4 W B Hardy On the Structure of Cell Protoplasm. In addition to these original articles there are included in the part the Proceedings of the Physiological Society

New Inventions.

AN IMPROVED NEEDLE-HOLDER.

HITHERTO needle-holders of any use have been too expensive and not always capable of being readily rendered aseptic. The illustration below shows an improved form of aseptic needle-holder which has been introduced by Messrs Arnold and Sons of West Smithfield and which possesses distinct advantages over those at present in use. (1) It is made in two pieces only, (2) it is very simple in construction and there are no complicated



Holder holding needle. Holder taken to pieces for cleaning.

parts to get out of order, and (3) it is very cheap The jaws open by compressing the spring handle This being the case we think it possible that their grip might loosen if the operator were trying to pass the needle through very tough tissue for he would instinctively tighten his grip on the handle To obviate this we would suggest the addition of a stop-plate or catch, easily removeable, which would prevent when necessary the sliding of the one blade on the other The instrument may be easily boiled when taken to pieces

ROYAL COLLEGE OF SURGEONS OF ENGLAND

AN ordinary meeting of the Council was held on June 8th, the President, Sir WILLIAM MACCORMAC Bart., K.C V O, being in the chair

On the recommendation of the Court of Examiners the Council amended Clause 4 Section 1 of the regulations for the Diploma of Fellow The effect of the alteration is that the first winter session if spent at a recognised science institution may be counted in lieu of one of the three winter sessions at a recognised medical school required for the first examination for the Fellowship of the College

A draft memorial was received from some Members of the College cordially endorsing the proposal that power should be obtained to confer the Fellowship of the College upon persons who are not Members and asking the Council to include in the proposed supplementary charter some scheme for the representation of Members of the College upon the Council. The Secretary was directed to write in reply that it had been determined to include only one matter in the application for a new charter as it was inopportune to introduce anything else.

The draft petition and draft charter relating to the institution of an Honorary Fellowship were presented to the Council and were approved with the exception that Members of the College are to be eligible for the Honorary Fellowship and that the number of Honorary Fellows is never to exceed 50 It was resolved that a meeting of Fellows and Members should be summoned for Wednesday, July 5th, 1899, at 3 P M, to consider the draft petition and charter, and that copies of these documents should be supplied to Fellows and Members applying for them

The following examiners were appointed —

Examiners in Elementary Biology under the Examining Board in England.—Peyton T B. Beale, Frederick Gymer Parsons Thomas William Shore, and Thomas George Stevens.

Examiners in Anatomy and Physiology under the Examining Board in England.—Anatomy Stanley Boyd William Bruce Clarke, Arthur Robinson, and Arthur Thomson. *Physiology* John Rose Bradford, George Alfred Buckmaster and Leonard Erskine Hill.

Members of the Board of Examiners in Anatomy and Physiology for the Fellowship of the College.—Anatomy James Ernest Lane, Berkeley G A. Moynihan Frederick Gymer Parsons and Alfred Harry Young. *Physiology* Thomas Grigor Brodie D'Arcy Power Ernest Henry Starling, and William Henry Thompson.

Examiners in Midwifery under the Examining Board in England.—William Radford Dakin, Walter S A. Griffith Arthur H. N Lewers, and Herbert Ritchie Spencer

Examiners for the Diploma in Public Health.—Part I. Arthur Pearson Luff. Part II. Sydney Arthur Monckton Copeman.

Mr Henry Morris was elected a member of the Court of Examiners

The Secretary laid before the Council a letter from the Royal Institute of Public Health forwarding a copy of a letter to the First Lord of the Treasury and the Lord President of the Council relative to the appointment of a medical officer to the Education Department and asking the College to make a similar representation

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THIS little book, as the author tells us in his preface was originally written for the use of the nurses at the British Hospital at Buenos Ayres but is now published in the hope that it may have a wider field of usefulness It will undoubtedly, we think, be of service to nurses in out-of the way places, to say nothing of dressers even in large hospitals The directions are very clearly given and the author, although not claiming that his methods are the only ones, yet gives no choice of details, for, as he very truly says, "If one has two or more methods of asepsis sepsis generally results" The book is, we believe, about to be published in England by Mr H. K Lewis

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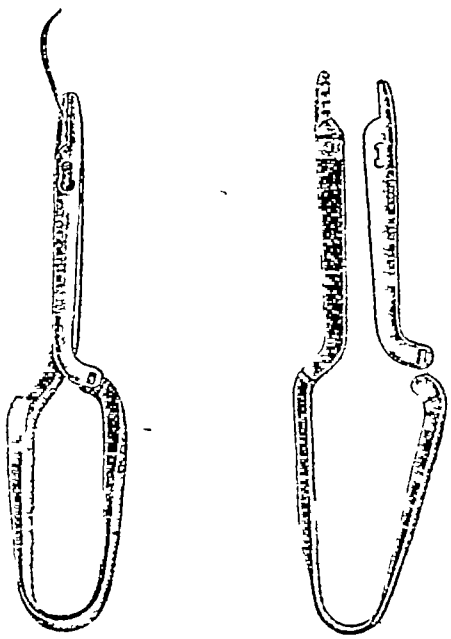
Solubility 4 W B Hardy On the Structure of Cell Protoplasm In addition to these original articles there are included in the part the Proceedings of the Physiological Society

New Inventions.

AN IMPROVED NEEDLE-HOLDER

HITHERTO needle-holders of any use have been too expensive and not always capable of being readily rendered aseptic. The illustration below shows an improved form of aseptic needle holder which has been introduced by Messrs Arnold and Sons of West Smithfield and which possesses distinct advantages over those at present in use (1) It is made in two pieces only, (2) it is very simple in construction and there are no complicated



Holder holding needle. Holder taken to pieces for cleaning

parts to get out of order, and (3) it is very cheap The jaws open by compressing the spring handle This being the case we think it possible that their grip might loosen if the operator were trying to pass the needle through very tough tissue for he would instinctively tighten his grip on the handle To obviate this we would suggest the addition of a stop-plate or catch, easily removeable, which would prevent when necessary the sliding of the one blade on the other The instrument may be easily boiled when taken to pieces

ROYAL COLLEGE OF SURGEONS OF ENGLAND

AN ordinary meeting of the Council was held on June 8th, the President, Sir WILLIAM MAC CORMAC, Bart, K C V O, being in the chair

On the recommendation of the Court of Examiners the Council amended Clause 4 Section 1, of the regulations for the Diploma of Fellow The effect of the alteration is that the first winter session if spent at a recognised science institution may be counted in lieu of one of the three winter sessions at a recognised medical school required for the first examination for the Fellowship of the College

A draft memorial was received from some Members of the College cordially endorsing the proposal that power should be obtained to confer the Fellowship of the College upon persons who are not Members and asking the Council to include in the proposed supplementary charter some scheme for the representation of Members of the College upon the Council The Secretary was directed to write in reply that it had been determined to include only one matter in the application for a new charter as it was inopportune to introduce anything else.

The draft petition and draft charter relating to the institution of an Honorary Fellowship were presented to the Council and were approved with the exception that Members of the College are to be eligible for the Honorary Fellowship and that the number of Honorary Fellows is never to exceed 50 It was resolved that a meeting of Fellows and Members should be summoned for Wednesday, July 5th, 1899 at 3 P M, to consider the draft petition and charter, and that copies of these documents should be supplied to Fellows and Members applying for them

The following examiners were appointed —

Examiners in Elementary Biology under the Examining Board in England.—Peyton T B Beale, Frederick Gymer Parsons, Thomas William Shore, and Thomas George Stevens.

Examiners in Anatomy and Physiology under the Examining Board in England.—Anatomy Stanley Boyd William Bruce Clarke, Arthur Robinson and Arthur Thomson *Physiology* John Rose Bradford, George Alfred Buckmaster and Leonard Erskine Hill

Members of the Board of Examiners in Anatomy and Physiology for the Fellowship of the College.—Anatomy James Ernest Lane, Berkeley G A. Moynihan Frederick Gymer Parsons and Alfred Harry Young. *Physiology* Thomas Grigor Brodie D'Arcy Power Ernest Henry Starling, and William Henry Thompson.

Examiners in Midwifery under the Examining Board in England.—William Radford Dakin Walter S A. Griffith Arthur H. N Lewers, and Herbert Ritchie Spencer

Examiners for the Diploma in Public Health.—Part I.: Arthur Pearson Luff. Part II: Sydney Arthur Monckton Copeman.

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deration But it will be generally approved by the profession, as will any future action that may be taken against practitioners who continue to offend against the sound and ancient opposition of the profession to advertisement

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THE report of the Pharmacopœia Committee to the General Medical Council touches upon many points of interest both to medical practitioners and to pharmacists, and in its opening sentence it also serves to relieve any lingering anxiety about the reception of a work marked by such radical changes The Pharmacopœia Committee have to report upon the reception accorded to the volume, upon the steps being taken to accumulate material for the next Pharmacopœia, and upon the work which has already been done in connexion with the promised Indian and Colonial Addendum. The reception of the volume must have surprised and gratified all who remember the somewhat chequered career of former Pharmacopœias It has been submitted to rigorous criticism without the detection of any errors of fundamental importance, but the success of a book is really to be gauged not by the criticisms but by the sale. Notwithstanding the increase in the price—an increase necessitated by the cost of production—the report states that 25,225 copies have passed into circulation and that the stock in hand is running low These figures no doubt represent the first great rush for the new standard and it is not to be expected that they can be kept up in ensuing years, but they must have sufficed to clear the expenses incurred and to leave a margin of profit which will doubtless be applied to the preparation of the next Pharmacopœia It is true that the circulation to a large extent depends upon the number interested in maintaining their stock in trade up to the official standard, but an important and flattering criticism, which has increased the circulation, is afforded by the official adoption of the Pharmacopœia by two colonies, Queensland and Victoria

At the November meeting of the General Medical Council there were indications of a desire to obtain the frequent, or even constant, coöperation of the pharmaceutical societies of Great Britain and Ireland These societies have appointed Mr C EKIN, Dr W INGLIS CLARK, and Mr R J DOWNES to confer with members of the Pharmacopœia Committee and already one conference has been held at which the chairman, Dr LEECH, presided These meetings must add largely to the value of the next volume, since they afford opportunities for the interchange of ideas between physicians and pharmacists and for the discussion and the estimation of the value of sundry criticisms

A most important innovation has been recommended by the Committee and adopted by the Council in connexion with the investigations in pharmacy and pharmaceutical chemistry which are to be made by experts Hitherto, although such work was generously undertaken at the suggestion of the General Medical Council or of the Pharmaceutical Society, the results were considered to be confidential reports and the labourers were not individually credited with the good work performed The materials supplied were duly considered and utilised and acknowledgment of indebtedness was made in general terms in the preface It is now proposed that the publication of such reports shall in future be authorised by the Pharmacopœia Committee, and in favour of this innovation lies the obvious fact that the reports will be submitted to criticism and, if need be, to further investigation prior to the incorporation of the results in an authoritative work where, whether right or wrong, they must remain until a new Pharmacopœia is issued It is even possible that when the credit and the responsibility are thus definitely assigned to individuals the work will be approached in a somewhat different spirit

It will be remembered that in a report to the General Medical Council last November some indications were given of the probable scope of the proposed Indian and Colonial Addendum This report has been very widely circulated under official conditions which should entail prompt attention, and already a large number of letters has been received from many of the medical and pharmaceutical authorities in India and the British Colonies The interest which is now being shown in tropical diseases may perhaps add largely to the amount of material which must be considered by the Pharmacopœia Committee, since it is reasonable to suppose that many medical men in this country who have had experience in our colonies will be anxious to coöperate with those who are still locally engaged in active work We gather from the report that Surgeon-General G BIDIE has already led the way in this direction

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LAST week, as our readers know, those who took part in the campaign on the Nile of 1896–97–98 which culminated in the battle of Omdurman, the capture of Khartoum, and the overthrow of the power of the KHALIFA, received a Parliamentary vote of thanks for their services In the Commons the thanks of the House were embodied in the form of a series of resolutions introduced in an eloquent and excellent speech from the First Lord of the Treasury and seconded by Sir H CAMPBELL-BANNERMAN, the Leader of the Opposition There was, however, one very striking and disappointing feature connected with the proceedings The labours of the medical officers accompanying the army on the occasion in question were not recognised and the list of names of those who had rendered distinguished services did not include that of a single medical officer The Surgeon General upon whom the responsibility falls is the representative of the medical branch of the service, the work done was eminently satisfactory, and in the words of Lord KITCHENER "the medical arrangements were so conducted as to afford the maximum of comfort with the minimum of suffering"

That Mr BALFOUR is an ingenuous, large minded, and independent statesman his political opponents as well as his party followers generally recognise, but he was, we may assume, simply the mouthpiece of the military and War Office authorities on the occasion and followed, we regret to say, the traditional line of action where the medical service is concerned It seems to us that the explanation which he proffered to the House in reply to Dr FARQUHARSON'S protest on behalf of the medical profession was a singularly weak and unsatisfactory one Surgeon-General TAYLOR, upon whom the responsibility fell of directing all the field medical arrangements and who was

THE LANCET.

LONDON SATURDAY, JUNE 17, 1899

THE recent session of the General Medical Council was remarkable not only for the length of time over which it extended—10 days—but for the nature of the business which occupied the attention of the members It is becoming more and more evident that the General Medical Council is a semi public body, intermediary as it were between the State and the public on the one hand and the medical profession and its various organisations and corporations on the other Hitherto it has kept well within the bounds of its most obvious functions as defined in the Acts and has even, perhaps, been slow to recognise all that was involved in its responsibilities, being disposed to take an easy view of its duties and to let the great profession over which (in a sense) it presides take its own course and look after its own interests and morals The Council has now found out that Parliament did not create it for strictly limited purposes and that more is expected of it than the merely clerical duties of registration or a formal and courteous peep into the methods of examination employed by the various educational bodies Both the Government and the profession are now looking to the Council for the solution of difficult questions and on the wisdom and moderation with which it treats these questions will depend in a great measure its future history If it is to act effectively and withal promptly and justly it will have to procure some amendment of the Acts under which it works, while the concession of such amendments will depend on the use which the Council makes of its present powers "To him that hath shall be given" The most serious lesson of the late meeting was the demonstration that the function of the Council is hindered by the limited and uncertain powers of the individual bodies represented so powerfully in the Council No time must be lost in the adjustment of these powers and of the machinery for bringing them into coördination with the central power of the General Medical Council, and there is reason to hope that by November a moderate Amendment Bill may be prepared which the Government will be willing to accept, especially if in the meantime the profession displays unanimity and supports the Council in the wise use of its present authority

In the multifarious business of the late meeting on which it is our duty to comment the first place must be given to the action of the Council in regard to medical aid associations Whether we regard the conciliatory action of the Council in respect of medical aid associations composed of friendly societies in whose ordinary procedure the paid right[illegible]asser does not appear, or its more stern attitude towards unde[illegible] associations promoted by commercial companies and that [illegible] by wholesale processes of advertising and canvass[illegible]ther case we cannot fail to see that the Council has taken a large view of its powers Therefore the Board of Conciliation has our best wishes, but we must make this proviso—that the question of wage limit be sooner or later, formally or informally, brought into the purview of the Board But while we think so we would urge on the profession not to make this a hindrance to the constitution of such a Board We speak with some authority on this subject It is recognised that through our Special Commissioner we have illustrated the wide and various bearings of this question throughout the land and even in foreign countries And we have shown that if the profession is driven to it it can hold its own and put the medical associations and friendly societies in an isolated and unfavourable position The Board of Conciliation should end all this strife, the more so if, as the General Medical Council tells us, the leaders of friendly societies recognise the inadequate treatment of their medical officers and are anxious to deal more liberally with them It will be time enough after the Board has been constituted to show that only by the introduction of a wage limit can fair treatment be ensured to the medical officers of these societies In the interval between now and November the various medical, defence, and medico-ethical societies will have the opportunity of considering the whole question and of suggesting nominations for the Board They should confer with each other and agree on half a dozen names For this purpose the whole profession is before them, excepting the members of the General Medical Council who are excluded by the fact of their judicial functions It is a significant fact that there was no vote taken against the Board of Conciliation in the Council. The division was between those who voted for it—20—and those who did not vote at all—eight Our columns will be open to discussion of the best method of constructing this Board and we look hopefully towards the friendly settlement of questions which now cause much friction Of one thing we are certain—the medical profession only wants justice

The Council showed proper discrimination in dealing with this matter It passed a very significant resolution in connexion with another set of medical aid associations—those promoted by commercial companies who send the professional canvasser round the town and urge the patients of other practitioners to join their associations Dr GLOVER read to the Council a graphic illustration of this system which in some districts threatens to ruin medical practice and to demoralise practitioners who have to contend against it as well as those who profit (save the mark) by it The Council has given notice that any practitioner who abets this system of canvassing and is proved to do so will incur its strong disapproval, and after due warning may be charged with infamous conduct in a professional respect, with its inevitable punishment of erasure from the Medical Register It is for the medical officers of these associations to protect themselves They would not personally canvass the patients of another medical man It is intolerable that they should do so under cover of a commercial company They may have acted inconsiderately But the resolution of the Council should open their eyes, as it will leave them without pity for any punishment which they may incur This resolution is expressed in terms of studied

CHARCOT,[1] BALLET, DUTIL, and others were the first to point out this fact and to give isolated cases illustrative of the same and altogether some nine cases have thus far been published. The clinical symptoms in all the (published) cases indicate an extensive affection of the motor cells of the spinal cord, sensory symptoms being entirely absent, and in every case, with the doubtful exception of one case recorded by LAEHR in *Charite Annalen*, 1894, the diagnosis of progressive muscular atrophy, mostly of the Aran-Duchenne type, could be made There is, however, an interesting difference among these cases as to their relation to previous infantile paralysis Thus, in CHARCOT S case, for instance, the infantile paralysis affected the lower extremities, while the later disease began in the muscles of the shoulder In other cases the atrophy of the later (adult) disease started in the parts previously affected as well as in healthy parts, while in LANGER S case,[2] in which the poliomyelitis had affected both right extremities and a small portion of the left leg, the later disease was strictly confined to the muscles of the same parts

The pathogeny of the later disease was generally accepted in the form propounded by CHARCOT, according to whose views there existed in some individuals a certain disposition, a kind of vulnerability of the ganglion cells of the anterior horns which at one period of life might give rise, under the influence of morbid agencies, to an acute anterior poliomyelitis and at another and later period to a progressive muscular atrophy, the two diseases being thus manifestations of a single and fundamental original morbid condition. Further, the originally damaged parts, though apparently restored to health, might under later stresses of illness reveal themselves also as fresh foci of disease This view has been accepted by BALLET, DUTIL, STRÜMPELL, and others and seems to accord best with known facts

Annotations.

"Ne quid nimis."

THE SANITARY CONDITION OF ST PANCRAS

IN our last two issues we have referred to a report by Dr Hamer, assistant medical officer of health of the London County Council, on the sanitary condition of St Pancras and to a report by a special committee which was appointed by the vestry of St. Pancras to inquire into the subject matter of Dr Hamer's report Dr Hamer had found in St Pancras many insanitary conditions requiring remedy and had come to the conclusion that seven additional inspectors should be appointed The committee, however, has recommended the appointment of only two additional inspectors and has we must presume, satisfied itself that its existing staff is numerically sufficient to deal with the conditions which Dr Hamer has pointed out. The committee has laid stress on the "demoralisation" of the sanitary staff has referred to their "discontent" and "insubordination" and, in so far as these disturbing influences have prevented the proper carrying out of their duties, we have recognised that it is right that the committee should not seek a remedy only in the multiplication of sanitary inspectors We have therefore written to the vestry asking for the material which would have enabled us to form some opinion on the matter but have been unable to obtain it as the report is out of print. We much regret that this is the case, for while we are desirous of doing full justice to the St Pancras Vestry and its special committee we are, in the absence of this evidence, unable to accept the committee's conclusions, which are widely different from those of Dr Hamer The vestry have had in Dr Sykes an officer whose capacity and zeal are generally recognised by those familiar with sanitary administration, and the special committee's condemnation of the vestry's staff will not alone suffice to shake the confidence of the public in the officers There is, indeed, not sufficient reason for doubting the soundness of Dr Hamer's conclusions and the only question which remains is whether the London County Council will be satisfied with the small addition to the staff which the vestry has decided to make Judged by the reports before us we fail to see how with this addition St Pancras sanitary administration will materially differ in the future from the administration of the past

PRECAUTIONS IN COAL-MINES

IN 1894 the report was issued of the Royal Commission on Explosives from Coal dust in Mines and the conclusions contained therein promised, if adopted, to place the coal miner under much less risk. As was shown early in the same year by Mr Henry Hall, one of Her Majesty s Inspectors of Mines coal-dust is frequently the cause of disastrous explosions The experiments upon which Mr Hall based his valuable conclusions related to the causes which lead to the ignition of the finely suspended coal dust in the air of coal-mines The use of gunpowder for blasting or opening purposes was subsequently condemned, as the flame of a "blowing out" gunpowder shot instantly ignites fire-damp, or a coal-dust laden air, the latter giving a very violent result or explosion On the other hand, the so-called high explosives were shown to be incapable of igniting or exploding coal-dust The abolition of gunpowder therefore for blasting purposes in coal mines was recommended in favour of the adoption of certain high explosives This conclusion led to an explosives order being issued which came into effect nearly two years ago Writing to the Home Secretary Mr Hall now says in his report for the year 1898 that "it has proved a success beyond all expectation and you, Sir, are to be congratulated on having initiated the legislation which has achieved such glorious results The deaths from explosions of gas and dust for the last two years are a record, the two years together have only killed 46 persons, a figure less than that recorded for any *single* previous year The most favourable year was 1888 when 49 persons were killed, and taking any two previous consecutive years the best were 1891 and 1892, when 174 lives were lost, as against 46 for 1897 and 1898, thus we have apparently attained that which in the past has set mining skill and care at defiance" It is remarked, further that "no doubt there will still be people who will prove impervious to the logic of these facts and they will tell us it is a mere coincidence, and should this immunity continue for the next five years they will still try to maintain that view" One of the chief objections raised against the employment of safety explosives instead of gunpowder was that the former led to the evolution of poisonous fumes, but it appears as a final answer to this that the only complaint made about fumes during the year came from a mine where gunpowder was the explosive used It even seems probable

[1] Leçons du Mardi, 1888

[2] Alte infantile Poliomyelitis mit folgender Muskelatrophie, Jahrbuch der Wiener k. k. Krankenanstalten Band v ii Th.

in command of his own branch of the service, has the rank of a general officer, the distinction between combatants and non combatants has moreover been abolished by recent regulations, and we should therefore have thought that the Government would have seized the first opportunity of giving practical effect to their own measures. It is all very well to talk of the great and distinguished profession to which the honourable Member for West Aberdeen belongs, but why should every opportunity be neglected of showing that it is so regarded? If the custom of the service be such as that laid down in the House of Commons all we can say is that it is a custom to be more honoured in the breach than in the observance and the sooner that the tightness of this piece of red tape be loosened the better. The army medical services admittedly did excellent, very arduous, and long sustained work in Egypt, without which Lord KITCHENER and his troops would never have accomplished what they did, and medical officers naturally expect to receive the thanks of Parliament in common with other officers by the selection and inclusion of the name of one of themselves in the list.

Now that we are touching upon this subject, we may add that the amount of work and responsibility which fell to the lot of the medical services during the late campaigns on the North West frontier of India in 1897–98 was enormous. Whether those expeditions were politically wise or not, or whether all the generals did their work equally well, are matters of opinion with which the medical services have nothing whatever to do. We have never heard, however, that there was any failure in the field medical organisation or in the provision of hospitals and a hospital service on a very large scale, but the Surgeon General of Her Majesty's Forces in India upon whom all the labour and responsibility devolved cannot be said to have been extravagantly rewarded by having the honour of a Companionship of the Bath conferred upon him.

DURING recent years the investigation of the life histories of certain diseases, notably of the nervous system, has gradually brought about a conviction that the starting-points in the etiology of nervous diseases in an adult must sometimes be looked for in the affections of childhood in which the nervous system has been involved. In the *Journal of Nervous and Mental Disease* (May, 1899) Dr WILLIAM HIRSCH gives very full records of an interesting case and calls attention to the fact that infantile spinal paralysis may give rise to spinal disease in later life. The case is as follows.

A man, 45 years old, a tailor, and free from indications of syphilis, twice married and in the enjoyment of perfect health up to three years previously, began at first to notice a stiffness and weakness in the left leg which gradually became worse. After some time the right leg also became affected. He soon became unable to use his leg in working his sewing machine and he was not able to stand or walk for any length of time. The upper extremities remained unaffected and there were no sensory symptoms whatever. The functions of the bladder and rectum were unimpaired and sexual power was not diminished. Examination revealed an atrophy of some of the trunk and shoulder muscles and especially of the deltoid, supra spinatus, and infra spinatus of the right side. These muscles also exhibited fibrillary tremors and the reaction of degeneration. There was no atrophy in the muscles of the lower extremities and their electrical reactions were normal. The knee-jerks were exaggerated and there was ankle clonus on both sides. The plantar, cremasteric, and abdominal reflexes were present. The reflexes in the upper limb were not increased. Sensation to touch, pain, and temperature was normal in all parts of the body and the *muscular sense was unimpaired*. Both speech and pupillary reactions were normal and the ophthalmoscope revealed nothing abnormal. Besides the atrophied shoulder muscles above mentioned there was marked atrophy also in the biceps, triceps, and pectoral muscles, also on the left side. (It appears that when the patient was a child of two years of age he had an attack of infantile paralysis which left behind a partial atrophy of the left upper extremity.) The lower limbs now gradually became more spastic and rigid so that within a few months he was unable to walk at all and he began to suffer from shooting pains in the legs. These pains were so intense that he had to be given hypodermic injections of morphia at frequent intervals. Both sets of symptoms progressed in severity and he became completely bedridden. The lower limb muscles atrophied and assumed a condition of marked contracture (extreme extension and adduction), and a progressive paralysis of the upper limbs also now supervened till both arms were completely paralysed and only the fingers and one wrist could be moved at all. Cutaneous sensibility was retained and the functions of the bladder and rectum were unaltered. He now developed a bulbar paralysis with difficulty of swallowing and died without developing any other symptoms.

The necropsy which was made eight hours after death showed the following changes in the nervous system. The brain seemed normal in colour, consistency, vascularity, and general appearance. The bulb and spinal cord, however, showed changes and on microscopical examination the following lesions were found. The cervical cord from the second to the fifth segment showed a considerable atrophy and destruction of the cells in the left anterior cornu, with dilatation of pericellular and perivascular lymph spaces and proliferation of blood vessels. There was marked degeneration in Goll's column, especially next the septum. On the right side similar changes but to a far less extent were present. In the fifth, sixth, and seventh cervical segments similar changes were found and in addition a degeneration in the lateral columns (pyramidal tracts) most marked on the left side. At the eighth cervical segment (which supplies the fingers) the grey matter and most of the cells appeared to be normal, the degeneration being limited to the white substance (pyramidal tract). In the dorsal segments there was much diffuse degeneration throughout all the grey substance and at the seventh dorsal segment the degenerations were so extensive that they had the aspect of a transverse myelitis. In the lumbar cord the degenerations were still abundant, but less so in the right half, which contained a fair number of undestroyed cells. Finally, the bulb showed marked degeneration and loss of cells in the hypoglossal, vago-glossopharyngeal and ambiguous nuclei, and in adjacent parts of the substantia reticularis.

the pressure of poverty or of vice and the other survivals of savagery which remain in it, cannot always be trusted even with its own most natural charge We may hope that ultimately the moral forces which have refined the manners of a majority will be able to civilise the mass and that cruelty will become practically extinct In the meantime fairness and mercy, now happily furnished with the instruments of law, must be allowed to operate for the protection of the weak against the strong and brutal. Among the most efficient of such instruments is the National Society for the Prevention of Cruelty to Children which needs no stronger commendation than the record of its doings

THE APPROACHING ELECTION TO THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND

MONDAY, June 12th, was the last day on which the nominations of candidates for the two vacancies on the Council could be received and the names of four candidates have been given in The two vacancies arise from the terms of office of Mr T R. Jessop of Leeds and Dr Ward Cousins of Southsea having come to an end, these two gentlemen, however offer themselves for re-election and the two other candidates are Mr H. W Page, surgeon to St Mary s Hospital, London, and Mr Jordan Lloyd of Birmingham The election will take place on Thursday, July 6th, and voting papers will be sent to all Fellows in the British Isles It will not be necessary to apply for them, Fellows may, if they prefer it, vote personally

THE INSTITUTE OF CHEMISTRY

AFTER some years of struggle the Institute of Chemistry has at length attained an importance amongst examining bodies which is now being very generally recognised. The Institute of Chemistry was founded with the object of conferring some qualifying mark upon those following chemistry as a profession. It was not until 1885 that a Royal Charter was obtained, in consequence of which the Institute rapidly assumed the position of a governing and examining body comparable in character with those of the medical profession. The examinations, which are thoroughly practical in character, have been brought up to a high standard, while amongst other worthy aims not the least commendable is that of establishing a code of professional conduct The Fellows of the Institute now number nearly 1000 The examination laboratories were specially designed some years ago for the practical examination in the premises of the Institute in Bloomsbury square. Each candidate presenting himself for examination must first satisfy the examiners that he has been through a thorough course of systematic study at an institution of recognised educational standing We have frequently referred in these columns to the fact that no definite qualifications of the public analyst appointed under the Food and Drugs Act are required. In a clause in this Act it is simply stated that he must be a person possessing 'competent knowledge, skill, and experience," without any reference to the possession of a diploma. We have consequently represented that the Fellowship of the Institute of Chemistry might meet the case As a matter of fact, the Local Government Board have comparatively recently announced that they will accept the qualifications of Fellowship and Associateship of the Institute of Chemistry as satisfactory evidence of competence in chemistry, and in order to meet the further requirements of the Board the Council have lately decided to establish an examination in therapeutics, pharmacology, and microscopy That the Institute of Chemistry is well supported was evident on the occasion of its last annual dinner which took place on June 8th at the Trocadero Restaurant The President of the Institute, Dr Thomas Stevenson, was in the chair and there were present representatives of the Board of Agriculture, certain of the Presidents of the learned societies, and several distinguished men of science. The progress of the Institute was the subject of the many speeches which were made. We cordially join in congratulating the Institute on this progress and not the less because it aims at raising the chemical profession to the same level of dignity as other learned professions

THE CASE OF DOCKRELL v DOUGALL A TESTIMONIAL TO DR DOCKRELL

READERS of THE LANCET will remember the details of this case and that in extending our sympathy to Dr Morgan Dockrell in the matter we felt bound to record a protest against the treatment which he had received We did not, and do not, consider that either the jury in the first instance or later the judges in the Appeal Court really understood the deep importance of the matter at issue We are therefore glad to learn that a testimonial fund has been started with the object of making a presentation to Dr Dockrell "which" to quote the letter of those responsible for the movement, "shall express the admiration of his medical brethren for his courage and public spirit and in some measure recoup him for the very heavy costs in which he has been mulcted" The case involves a principle of the highest importance to all our readers, for Dr Dockrell s two attempts to secure by law the exclusive right to control the use of his own name were made in the interests of every member of the profession We hope, therefore, that many favourable responses will be sent to Mr Ernest Clarke, 3, Chandos street, Cavendish-square, W , who is acting as honorary treasurer of the fund.

VITAL STATISTICS OF THE BURGH OF GOVAN

THE burgh of Govan on the Clyde is fortunate in numbering among its inhabitants a member of our profession who possesses the inclination as well as the ability to prosecute an independent and laborious inquiry into the causes of mortality in that burgh Dr W G Barras of Bellahouston has forwarded to us a copy of a lengthy report which he has recently presented to the provost, magistrates and commissioners of Govan, in which he gives very complete particulars of the local vital statistics, and he has been careful to make his book as interesting as possible to dwellers in parts of the kingdom which are remote from Govan by the addition of a valuable introduction which gives a general and topographical history of the burgh from very early times On the authority of Fordun we learn that the first historical reference to Govan dates back to A D 565, in which year a monastery was founded there by Constantine, of which he was the first abbot and in which he was buried after having suffered martyrdom As early as the sixteenth century Govan, or Meikle Govan as it was then called appears to have ranked among the largest towns of Scotland At the period referred to what is now the flourishing city of Glasgow was no more than a village situated above Govan on the Clyde both places owing their prosperity to the coal and iron industries of Lanarkshire, aided, of course, by their commanding position on the banks of a navigable river Govan at its largest was a hamlet numbering but a few hundred inhabitants, mostly engaged in agricultural pursuits or in supplying the Glasgow market with fruit and vegetables. Another of its staple industries was that of salmon fishing, for which it was long famous, and this occupation was continued down to a period within the memory of persons still alive. In the first decade of the

that in regard to fumes gunpowder is worse than the nitro-explosives and Mr Hall quotes an example of a gunpowder pit which he inspected where the fumes were so thick and blinding that the manager lost his way and he had some difficulty in finding it again We expressed the opinion in these columns more than five years ago that if the recommendations of the Royal Commission could be put in force without delay there would be little doubt that the risk of explosions in coal mines would be greatly limited. Soon after the report of the Royal Commission was issued a terrible explosion occurred in the Albion Colliery in South Wales by which nearly 300 lives were lost This was known to be a fiery and dusty mine and it was not certain whether the preventive measures of using exclusively high explosives for "blowing-out" purposes and of keeping the mine watered had at that time been taken Mr Hall's report deals with only one colliery district, the Liverpool district, and it is to be hoped that the reports from other districts may be equally satisfactory We imagine that this must be the case, for happily we have heard less frequently of late of those frightful disasters to which the colliery districts are liable If so, the importance of the experiments which suggested the preventive measures indicated and now enforced cannot be too highly estimated

TYPHOID FEVER IN HOLBORN-CIRCUS

DR SEDGWICK SAUNDERS, the medical officer of health of the City of London, in his report on the health of the City for the five weeks ended May 27th, 1899, gives an account of an outbreak of enteric fever in a large business house in Holborn circus which presents points of some interest The outbreak occurred between Jan 23rd and Feb 16th and during that time 53 of the inmates were attacked, the greatest number of cases in any one day being eight The total number of persons employed in the establishment was 620, but of these only 416 slept on the premises, though an additional 71 took dinner and tea in the establishment The attacks were apparently confined to the 416 persons who resided on the premises, there being, it seems, no cases among the remaining 204 In other words, the 416 residents were presumably exposed to some conditions which were foreign to the remaining 204 Dr Sedgwick Saunders has been unable to discover any connexion between the outbreak and polluted water or milk, and although the inquiry is still incomplete suspicion appears to attach to the drainage system which is manifestly defective There would, however, be a difficulty in explaining the outbreak by a thesis of this nature since the exemption of the 204 non residents would militate against its acceptance The outbreak has, too, some of the characters more commonly associated with specifically polluted food of some kind than with one due to drainage defects The sex distribution of the attacks does not throw much light on the matter, as although but five females were attacked the percentage incidence on males was but slightly in excess of that upon females, a circumstance which in itself tends to discredit a view that contaminated milk was the cause of the outbreak Bacteriological examinations were made by Dr Washbourn of specimens of water, milk, and butter, but with negative results and clearly but little value is to be attached to bacteriological investigations in an outbreak of this kind, since the specific pollution of whatever may have been the causative agent was evidently of a transitory nature, indeed, it is even possible that all the cases may have been infected before the first of the group was recognised Evidence must be sought for rather in the distribution of the cases and in a detailed examination of the several articles of food consumed by those attacked as contrasted with those who escaped Dr Sedgwick Saunders acted with great promptitude and at once took all precautionary and preventive measures The milk was sterilised and the supply was changed, the water cisterns and mains were cleansed, and the patients were rigidly isolated and carefully nursed, the fatality rate amounted to 11 per cent

THE BIRTHDAY HONOURS

IN the list of birthday honours which we published last week we inadvertently omitted two names—those of Dr John Sibbald, M D Edin, F R S Edin, &c., and Major William Babtie, R A M C Dr Sibbald, who lately retired from his position as Commissioner in Lunacy for Scotland and who is well known as an authority in questions connected with lunacy, particularly with regard to administrative matters, received the well deserved honour of knighthood. Major Babtie has been made a C M G in recognition of his services in Crete in connexion with sanitary matters We congratulate Sir John Sibbald and Major Babtie, C M G, and regret the week's delay in the expression of such congratulation

A SINGULAR CASE OF MASTOID ABSCESS

IT is a generally accepted fact that the cells in the mastoid process do not develop until after the third year of life and it follows that mastoid abscess of the kind found in the adult is practically unknown in infancy An apparent exception to this rule is quoted in the *Journal de Clinique et de Thérapeutique Infantiles* of June 1st, 1899 The case was reported by Dr Lermoyez to the Société Française d Otologie, Laryngologie, et Rhinologie and was that of a child, aged two and a half months The starting point of the trouble as usual was an acute purulent otitis After three weeks an abscess was found beneath the upper extremity of the sterno-mastoid A cavity in the mastoid process full of carious bone and pus communicated on the one hand with the mastoid antrum and on the other by a small opening in the digastric fossa with the abscess just described The whole end of the process was removed, the cells and antrum were cleared out, and the child was well in six weeks This morbid condition which is known in France as the mastoiditis of Bezold is very rare if not unique in an infant and its occurrence almost at the time of birth is of equal interest to the anatomist and the surgeon

THE NATIONAL SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN

FROM details recently published we are pleased to note that the progress of this society during the past year has been satisfactory The net income has amounted to £51,319 as compared with £47,917 in the previous year, and it is a significant fact that the increase from ordinary contributions alone is £4925 The expenses for all purposes amount to £52,773 as against £53,000 for the year before These proofs of the society's continued popularity and of the economy observed in its administration are not discounted by the measure of success which has attended its efforts As many as 28,165 cases of alleged improper treatment have been investigated In 21,096 of these, with some unavoidable exceptions, the offenders were cautioned and in 16,223 cases subsequent supervision showed that the warning had been effectual In 2873 cases the offenders were prosecuted, a conviction being obtained in 96 27 per cent of this number By far the most prevalent forms of cruelty, as we have had occasion to note before, are neglect and starvation These together account for 21,755 of the whole number of wrongs recorded Ill treatment and assault come next with a total of 3748, then 1240 cases of exposure for begging purposes, then various less common forms of evil doing It is therefore abundantly proved even by the statistics of a single year that human nature, exposed to

sub-conscious state is not at all uncommon in the post-epileptic stage The condition is in many respects like that in somnambulism Both bigamy and perjury (one case each), given in the above list, show that these offences may be committed by epileptics in the automatic stage where the patient loses all recollection of his previous history or surroundings after a fit, and, moreover, that such a condition of amnesia and alteration of personality may in some cases persist for a considerable time (days or even months) before recovery (which may sometimes, also, be equally sudden) takes place

DEATHS UNDER ANÆSTHETICS

A DEATH under chloroform occurred on April 18th The patient, a woman, aged 24 years, was to be operated upon for varicose veins at the Stanley Hospital, Liverpool A "very slight dose" was given, unusual excitement appeared "towards the end of the first stage of anæsthesia" and respiration stopped We are not informed what method was employed, what was the duration of the anæsthesia, or who administered the chloroform It would appear that an over dose was taken during the patient's struggles and the respiratory centre was paralysed Dr David Morgan of Liverpool favours us with a brief note of a death under chloroform which occurred in Liverpool on April 6th The patient, aged 72 years took a "drachm" of chloroform. The eyeball was removed and cardiac syncope occurred, proving fatal Did this patient die from chloroform or because she had too little chloroform? Unless the narrators of such cases furnish the particulars as to method, duration and symptoms it is useless to speculate upon the cause of death. Cause must anticipate effect and there is no doubt a very adequate cause, for death under chloroform can always be traced if the recorders of such cases would only reason out the facts and help their fellow practitioners by carefully and logically detailing their experiences A death which occurred recently at St. Mary's Hospital illustrates the extreme difficulty of deciding whether chloroform can be safely substituted for ether in the later stages of an operation The patient, a woman, aged 34 years, suffered from malignant disease of the mamma and was given ether with a view to removing the breast During the progress of the anæsthesia some coughing occurred and chloroform was therefore substituted for ether The patient's colour changed, the pulse ceased, and she died apparently from circulatory failure A necropsy was held and the heart was found to be fatty A post-mortem examination of a patient who died under an anæsthetic at King's College Hospital recently showed masses of undigested food in the stomach, some of which had entered the trachea and bronchi causing suffocation The patient, a worker at a newspaper office had his arm broken by machinery and he was taken to the hospital to have his injuries treated As he had had a heavy meal he was allowed to wait two hours in the hope that his food would become digested The A.C.E. mixture was given with the result mentioned above In the case of a healthy man surely lavage or a hypodermic injection of apomorphine to empty the stomach is a safer proceeding than incurring the risks of vomiting during semi anæsthesia In the present case large masses of meat had passed into the air passages A fatality under chloroform is reported as having occurred at the Ophthalmic Hospital, Gray's Inn road. The patient, a man, aged 41 years, was placed under chloroform by the house surgeon for the removal of a diseased eyeball At the commencement of the operation the patient died suddenly We have no particulars to guide us in attempting to explain the death The same remark applies to the death of a child, aged 16 months which occurred at the Charing-cross Hospital on May 8th Two deaths in military hospitals of troopers are reported from Kilsea and Dublin, both deaths appear to have occurred early in anæsthesia and to have been referred to circulatory failure We are indebted to Dr Harold Dyer for careful notes of a death under chloroform which occurred recently at the Guest Hospital, Dudley The patient, a healthy man, aged 35 years, came under treatment for the radical cure of hernia. He was a nervous man He was prepared in the usual way and was given chloroform by one of the house surgeons, a Skinner's mask being used After two or three minutes violent struggling took place and lasted for about half a minute The anæsthetic was continued but the mask was held farther from the face. The pulse suddenly ceased, the pupils became widely dilated, and almost immediately respiration stopped. Upon drawing forward the tongue and performing artificial respiration three deep breaths occurred, but after that no signs of life appeared. The cause of death was "obviously heart failure, before any sign of respiratory failure" All the usual methods to restore life were adopted The possibility of death in such cases being due to the strain imposed upon the heart by struggling must not be lost sight of, nor must it be forgotten that fatalities have also arisen from simple fright But in the last class of case the death always occurs very early, usually within the first minute, while syncope due to violent muscular spasm is seldom met with except in persons whose heart is diseased and degenerated In struggling the irregular, often excessive, depth of the breaths leads to an increased intake

CHANGES IN THE SALIVARY GLANDS IN DIABETES

IN the *Boston Medical and Surgical Journal* of May 18th Dr H. F Harris has published an interesting paper on this comparatively unknown subject His attention was first directed to a possible relation between morbid conditions of the salivary glands and pancreas by the following case in which diabetes followed mumps The patient was a farmer, aged 42 years, who had had no illness until an attack of mumps three years before About a month after recovery he noticed that he was passing more urine than formerly, and since then the increase had slowly but steadily progressed and the other symptoms of diabetes appeared. He was much emaciated and passed in the 24 hours 6440 cubic centimetres of urine containing 4 6 per cent of glucose His subsequent history is unknown The writer found in literature several references to the fact that diabetes sometimes follows mumps He also ascertained that by the removal of all the salivary glands in a dog slight transient glycosuria could be produced—a conclusion which had been previously established by Reale (Congress of Berlin, 1890) Furthermore, the latter experimenter produced glycosuria in this way in dogs when he had failed to do so by removing the pancreas. Since the publication of Schmackpfeffer's thesis in 1817 on diseases of the pancreas the possibility of pancreatitis arising from mumps has been admitted, but there is some doubt as to the nature of the case to which he referred. Dr Harris could not find another case of pancreatitis due to mumps But when it is remembered that sublingual and submaxillary adenitis, orchitis, prostatitis, ovaritis, mastitis, nephritis, and thyroiditis, have been observed, it seems probable that a gland so closely resembling the parotid as does the pancreas would at times be involved. If so, as in the parotid and testicle, atrophy might ensue. That functional alterations in the salivary glands occur in diabetes has long been known, but the condition has received little attention from clinicians and pathologists The following case shows that profound changes sometimes occur in the salivary glands in every way resembling those found in the pancreas A man, aged 63 years, died from diabetes complicated with pulmonary tuberculosis and gangrene of

current century handloom weaving was the chief industry of the village, but about the year 1850, when shipbuilding began to revolutionise the trade of the district, Govan suddenly sprang into importance and in the year 1864 it acquired the dignity of a burgh Ever since that date the town has rapidly and steadily increased in size, until at the present time it stands seventh in the list of large Scottish towns and contains a population of nearly 73,000 In the course of the last 35 years, which is the period covered by Dr Barras's inquiry, the mortality of Govan, like that of Glasgow and most other large towns in England and Scotland, has varied considerably The mortality reached its highest point in 1864—namely, the year of incorporation—when it amounted to a rate of 33 2 per 1000, it was lowest in the year 1894 when the rate fell to less than half, or 15 5 per 1000, the rate in the entire period of 35 years having averaged 22 5 The tables which illustrate Dr Barras's report are systematically arranged, the classification adopted being that of the Registrar General, and a useful summary is inserted giving a general idea of the teaching of the tables, without this summary the entire report would lose much of its value and interest to the general reader In the first of his tables Dr Barras shows the mortality from all causes and also from infectious diseases in quinquennial periods from the year 1864 onwards From this table it appears that there has been a marked decrease in the later five year periods as compared with the earlier, both in the deaths from all causes and in those from diseases of the zymotic group Calculated on the present population of 73,000 the difference between the mortality in the first and in the last quinquennium represents a saving of 803 lives per annum Taking the average for the 10 years 1889-98 it appears that Govan has shown a death rate which is lower than that of all Scotland and also lower than that of the eight principal towns in the aggregate Considering the occupation of its inhabitants and the conditions under which some of them live such a rate reflects great credit on the local public health department, who are evidently doing their utmost to improve the health and prolong the lives of the people In quoting the mortality at ages under five years and above 70 years Dr Barras puts the rate at 12 1 and 1 2 respectively per 1000 of the population We presume, however, that the deaths at these ages are calculated on the total population and not on the population at corresponding groups of ages as is the case in England, for otherwise it would be difficult to understand how the above exceptionally favourable proportions could have been arrived at As regards the prevalence of particular forms of disease Dr Barras has much to say which is highly important but mainly of local interest, there is nothing which calls for particular comment in the incidence of the ordinary infectious diseases and his remarks on diseases of the constitutional and other principal classes, although of great importance to the people of Govan, are scarcely of sufficient general interest to need special notice in our pages

TYPHOID CHOLECYSTITIS

IN recent years cholecystitis in typhoid fever has attracted some attention But although it was observed as long ago as 1836 by Louis only a limited number of cases have been recorded This complication seems to be commoner than might be supposed,[1] but it rarely gives rise to distinctive symptoms In the *American Journal of the Medical Sciences* for March Dr C Camac has published the following case which was under the care of Professor Osler at the Johns Hopkins Hospital The patient was a coloured woman, aged 24 years, who was admitted to hospital after an illness of three weeks' duration marked by sudden onset, with headache and chill, vomiting, epistaxis, and abdominal pain. The chill recurred every day On admission the temperature was 104° F 13 intensely green watery stools were passed in one day The abdomen was not distended or tender On the fifth day abdominal tenderness was noticed for the first time, particularly in the right upper quadrant, where there was also dulness About nine centimetres below the costal margin and about three centimetres from the umbilicus a rounded, fairly resistant mass was felt. In consequence of the profuse diarrhœa amœbic abscess was thought of The Widal reaction, however, was well marked at a dilution of 1 to 70 Typhoid cholecystitis was suspected As a means of diagnosis a long hypodermic needle was inserted into the mass, it drew off about 15 cubic centimetres of a clear urine like fluid The patient became more comfortable Numerous motile bacilli suggesting typhoid bacilli were found in the fluid As there was no evidence of suppuration operation was deferred in the hope of resolution On the following day the patient was worse. There was great tenderness in the right hypochondrium and she was apparently suffering pain In view of the relief afforded in Mason's case[2] a second puncture was made at the same point But the tumour was not to be felt and only blood was withdrawn Laparotomy was then performed by Dr Cushing The gall bladder was greatly distended, the surface was dark green, the vessels were injected, and there were a few fibrous shreds at one spot After the gall bladder had been loosely attached to the abdominal wound 120 cubic centimetres of fluid similar to that previously withdrawn were aspirated On opening the gall bladder no necrotic area was found A drainage tube was inserted and the wound was partially closed and packed with gauze Death occurred on the following day At the necropsy Peyer's patches were found to be congested and ulcerated Dr Camac appears to regard laparotomy as the best treatment in these cases, but he admits that the results are probably as bad as in cases not operated on Tapping he deprecates as likely to lead to peritonitis

CRIMES COMMITTED BY INSANE EPILEPTICS

THE mental alienation associated with epileptic insanity often carries with it tendencies to violence, brutality, and crime The epileptic is prone to such excess at two particular periods of the disease—viz (*a*) during an attack of so-called "psychical" epilepsy (epileptic furor), or (*b*) in the post epileptic automatic stage succeeding severe fits It has generally been noted that as regards acts performed by the patient in the latter stage there is but little or no recollection of the deed when the patient has recovered from this condition of temporary mental automatism Hence crimes committed by epileptics have important medico-legal aspects In the *Transactions of the American Medico-Psychological Association* (1898, p 203) Dr H E Allison gives a valuable record of observations made by him on this subject based upon cases admitted to the Matteawan State Asylum Out of 2080 insane offenders committed to this institution there were 70 epileptics convicted of crimes as follows For assault, 16, for larceny, 14, for murder, 11, for burglary, eight, for robbery, rape, and forgery, four each, for arson, two; for unnatural crimes, two, and for bigamy, mayhem, perjury, vagrancy, and injury to property, one each It will be seen that crimes against the person in the form of assault, murder, rape, unnatural crime, and mayhem constitute a total of 34, or almost exactly 50 per cent of all the offences, and that assault and murder are the commonest forms of crimes against the person committed by epileptics It is to be noted that vagrancy occurs but once, yet there can be no doubt that the act of wandering at large in a dreamy,

[1] THE LANCET, June 12th, 1897, and July 9th 1898.

[2] THE LANCET, June 12th, 1897

Journal of Public Health Within two years of this we find Dr Brehmer at Görbersdorf opening the first sanatorium on Bodington's principles and working out his system into a carefully thought out organisation From this point the success of the treatment has been continuous, and we are preparing to welcome back into England a system which we ought to have accepted and developed nearly 60 years ago Probably others before Dr Bodington have at various times advocated the rational treatment of consumption, but he is the first whose advocacy though bitterly opposed was successful in gradually, if slowly, changing the whole current of popular and medical opinion on the subject One of his patients whose case he describes in his book, a young lady in the third stage of consumption, whom he treated in 1837, is still living at Cheltenham, a grateful witness of his skill

IMPORTANT DECISION AS TO INFECTIOUS DISEASES

AN important case known as that of "Warwick *v* Graham" was decided on June 11th by Mr Justice Day on appeal against the interpretation put upon Section 124 of the Public Health Act, 1875, by two justices for the county of Cumberland The section deals with the power of compulsory removal of a sick person to a hospital for infectious diseases It has often been held that, although the section allows of such removal by order of any justice when the person suffering from an infectious disease "is without proper lodging and accommodation," yet its meaning is that such accommodation has to do with the welfare of the patient and not with the protection of other persons This view is taken because the clause further states that one of the conditions under which the removal may be effected is that the sick person is "lodged in a room occupied by more than one family ' This has been held to imply that protection against infection is not contemplated in the section so long as members of only one family are in question. But others have contended that the use of the word "or" in the section shows that there were two different sets of circumstances, in either of which removal of the patient under a magistrate's order could be carried out, and, further, it has been urged that the general intention of the Act is not the welfare of the individual but that it has concern with the public health and hence with the protection of the public against infection Magisterial decisions have varied according as one or other of these views have been pressed upon the justices, but hitherto no decision on appeal has been available for general guidance In the case in question a boy in Workington was suffering from scarlet fever and it was not pretended that he had not such proper lodging and accommodation as was necessary for his own welfare, but the corporation insisted that, owing to the position of the room which the patient occupied with respect to other rooms in the house, including the kitchen, it was impossible to isolate him in the sense of preventing the spread of infection to others The magistrates declined to regard Section 124 as applicable to such a case. They held that the proper lodging and accommodation which was necessary surmised no more than that the patient was provided with ordinary habitable, clean, and comfortable quarters such as are requisite for a sick person, and they refused to grant an order of removal to hospital. This decision was appealed against and although we have not yet before us the revised judgment of Mr Justice Day the brief account of it already published shows the case to be of sufficient importance to warrant our calling immediate attention to it For the judgment on appeal is to the effect that Section 124 was clearly directed to the protection of persons from infection and not merely to the protection of the sick person himself This judgment is in accordance with common sense, it is in accordance with the general necessities of the case as set out again and again by medical officers of health, but it is opposed to a number of opinions which have been given by legal members and officers of different sanitary authorities This difference of opinion has now prevailed ever since the Act of 1875 was passed, it has in many cases hindered the proper administration of the law against the spread of infection, and therefore we are glad that a decision has at last been given which must be regarded as setting the matter at rest

'CRUELTY TO WOMEN"

THE temperance and wisdom which characterised the proceedings of the first meeting of the League which has just been formed to secure seats for women in shops and of which the Duchess of Westminster is president afford a good omen for the realisation of the necessary reform which the new league has at heart Since this meeting, which was held under the presidency of the Dean of Westminster in the Jerusalem Chamber on the 8th inst, the Seats for Shop Assistants (England and Ireland) Bill has passed through committee, has been reported without amendment to the House of Commons, and has been read a third time There is reason to hope, therefore, that the realisation of the wishes of the kindly ladies who form the league is near at hand. That in some cases women should be compelled to stand in shops for from 12 to 14 hours daily with only two intervals of half an hour for dinner and 20 minutes for tea all the year round regardless of temperature is a standing disgrace to a country like England, and this is emphasised by the fact that in New Zealand a law already exists by which an employer is rendered liable to a penalty if he does not provide seats for his female assistants It is unnecessary to point out to our readers either the harm that is done to the women or the lessened capacity for work which is the outcome of thoughtlessness by employers in this connexion The present Bill before the House deals with England and Ireland only and it will be remembered that the Lords have recently thrown out a Bill on the same subject dealing with Scotland. It is to be hoped, however, that legislation will not eventually be restricted to any particular divisions of the United Kingdom At the meeting above referred to it was unanimously resolved that efforts should be made to form an advisory committee composed of medical men and the proprietors of shops and that the wives of proprietors of some of the shops should be asked to join the league. With this suggestion we are in full accord and we heartily wish success to a movement which we have always strongly supported

CHINESE PREVENTIVE MEDICINE!

WHETHER it be from the fact that the Chinese physicians consider that man is influenced by heat and humidity, the harmony of which constitutes life, or whether it be that they consider the human body as a harmonic instrument which is affected by the vibration of the muscles, tendons, nerves, and arteries, we know not, but the Sanitary Board of Hong Kong has just had a curious application made to them for permission to hold a procession of a somewhat corybantic nature to frighten away the plague which is increasing in Hong Kong, though we are glad to learn from a correspondent that it remains localised in No 9 health district, a part of the town rarely visited by Europeans As was pointed out by Dr Atkinson, principal civil medical officer, it is certainly not advisable for large crowds to gather in a part of the town affected with the plague, but the application was granted on the understanding that the firing of crackers and the beating of gongs should cease at nine o clock in the evening, moreover, no noise was to be made within a certain distance of the

the foot The body was much emaciated The pancreas was found to be very small, weighing only 35 grammes It was hard and nodular and on section showed numerous fibrous bands There was evidently atrophy secondary to old interstitial pancreatitis All the salivary glands were small Microscopically both the pancreas and salivary glands showed identical changes There was marked thickening of the trabeculæ which bind the lobules together In some parts all the acini of a lobule were destroyed and replaced by newly formed fibrous tissue The parotid acini had a diameter from 10 to 20 μ (in a normal parotid the diameter was from 20 to 25 μ) Microscopical examination of the other organs showed them to be normal

PRESENTATION TO MR G A SYME OF MELBOURNE

MR G A SYME of Melbourne, whose approaching marriage has been taken advantage of as a fitting opportunity to testify to the esteem and honour in which he is held by his brother practitioners in Melbourne, was entertained at the Vienna Café in that city on May 4th, when he was presented with a piece of plate In a congratulatory letter his fellow practitioners, after referring to his personal qualities and his surgical ability, address him as a representative and leading man of the profession No such compliment has previously been paid to any of the younger men in Melbourne and the occasion was made the more interesting by the circumstance that Mr Syme was quite unprepared for such a demonstration of regard and affection His work as a teacher both at the university and at the Melbourne and other hospitals has given him a wide area of influence and has gained him a great reputation for accuracy and thoroughness as well as for lucidity of thought and expression Mr Syme is to be congratulated on having earned such a demonstration of goodwill on the part of his *confreres*

THE SANITARY INSTITUTE

THE preliminary programme of the Eighteenth Congress of the Sanitary Institute, to be held in Southampton from August 29th to Sept 2nd, has now been issued and includes three general addresses and lectures Three sections will meet for two days each dealing with Sanitary Science and Preventive Medicine, presided over by Sir Joseph Ewart, M D St And , Engineering and Architecture, presided over by Mr James Lemon, M Inst C E , and Physics, Chemistry, and Biology, presided over by Professor Percy F Frankland, F R S There will be also eight special conferences—viz Municipal Representatives, presided over by Alderman T Walton, Chairman of the Southampton Health Committee , Port Sanitary Authorities, presided over by Mr Millar Wilkinson, Chairman of the Port of London Sanitary Authority, Medical Officers of Health, presided over by Dr T Orme Dudfield , Medical Officers of Schools, presided over by Dr C E Shelly, consulting medical officer to Haileybury College , Engineers and Surveyors to County and other Sanitary Authorities, presided over by Mr E P Hooley , Veterinary Inspectors, presided over by Mr W Hunting, Sanitary Inspectors, presided over by Mr C MacMahon, chief sanitary inspector at Torquay , and Domestic Hygiene, presided over by Mrs Patey The local arrangements are in the hands of an influential committee, presided over by the Mayor of Southampton, with Mr A Wellesley Harris, M R C S Eng , Mr W B G Bennett Assoc M Inst C E , Mr W Matthews, M Inst C E , and Mr C H Russell, M R C S Eng , as honorary secretaries The President of the Congress is Sir W H Preece, K C B , F R S , Pres Inst C E Mr Malcolm Morris will deliver the inaugural lecture, and Bailie J Dick, chairman of the Health Committee, Glasgow, will deliver the popular lecture We understand that over 300 authorities, including several county councils, have already appointed delegates. In connexion with the Congress a health exhibition of apparatus and appliances relating to health and domestic use will be held as a practical illustration of the application and carrying out of the principles and methods discussed at the meetings It not only serves this purpose, but also an important one in diffusing sanitary knowledge among a large class who do not attend the other meetings of the Congress

THE STUDY OF TROPICAL DISEASES IN GERMANY

THE new German School for the Study of Tropical Diseases is to be established at Hamburg Professor Koch to whose initiation the school is due, designed at first to locate the school in Berlin, but the great port of Hamburg has been wisely substituted so that a patient can be transferred directly from the ship to the hospital bed Accommodation is being provided for 30 patients

THE OPEN-AIR TREATMENT OF CONSUMPTION

IT is, perhaps, not sufficiently well known to the profession that it is to the initiative of the late Dr George Bodington of Sutton Coldfield, near Birmingham, that we owe the introduction of the open air treatment of consumption In 1840 he published a small book entitled, "The Treatment and Cure of Pulmonary Consumption" For some years he had been treating consumptive patients upon the open air and over feeding system and this book was the outcome of his researches and experience He protested most earnestly against the then prevailing plan of carefully confining such patients from fear of the evil influence of cold fresh air and so "forcing them to breathe over and over again the same foul air contaminated with the diseased effluvia of their own persons" He opposed vigorously the prevalent lowering treatment by antimony, calomel, and bleeding, and urged the administration of plenty of good solid food combined with exercise in pure air He advocated "frosty" air if possible and preferred the dry air of inland districts to that of the seaside His great specific was cold, dry air which he considered had a most powerful influence in "healing and closing the cavities and ulcers of the lungs" It is certainly remarkable,[1] as we have already pointed out, "that a village doctor should have arrived in 1840 at these conclusions which anticipated some of our most recent teachings" As might have been expected such novel teaching met with the bitterest and most violent opposition and this openly expressed dissent and disapproval by the profession had the natural result of making patients averse to undergo the treatment, with the result that Dr Bodington was not able to pursue his investigations But he had sowed the good seed which henceforth began to spring up and propagate, he had lighted a lamp which has never since been put out Only six years after this book appeared Dr John Hughes Bennett, who must have been well aware of Dr Bodington's work and the great controversy it raised, became a convert to his views Writing in 1871 in "Reynolds's System of Medicine," Vol III , page 578, he says "It is now 25 years since I became convinced of the injury of shutting up patients in their rooms during winter and regulating the temperature as was formerly the custom" Some years after Dr Hughes Bennett's conversion to open air treatment, we find a far greater publicity being given to Dr Bodington's views by a very favourable though tardy review of his book by Dr Benjamin Ward Richardson in 1857 in the January number of the

[1] THE LANCET March 11th 1882, p. 417

fensive putrefactive gases, although on opening the coffin ome months afterwards very little remained of the body f the rabbit except fur and bone

DISINFECTING THE AIR OF THE HOUSE OF COMMONS

WE announced a short while ago that it was proposed to try the effect of ozonizing the air of the House of Commons, since apparently the idea gained ground that the air of the House was the source of the epidemics of influenza which prevailed annually and markedly amongst the members In spite of the statement of Mr Akers Douglas that the experiment could not be entertained on the score chiefly of expense, while there was no certainty of the practical ments of the process, we believe on very good authority that some steps are being undertaken for ozonizing the air on an experimental scale In the meantime a correspondent has suggested that for this purpose nitric peroxide would serve as an excellent gaseous disinfectant. The gas is cheap and easily obtained Moreover, it acts as a carrier of oxygen, for as soon as it has done its work of disinfection and deodorisation by virtue of its available oxygen the residual nitric oxide may be made to take up oxygen again by simply allowing it to come into contact with the air This is very ingenious, but we fear that the method would be far too drastic for the purpose. Nitric peroxide in contact with moist air has a tendency to form nitric acid and its use in the House of Commons might prove the remedy to be worse than the disease The effect of nitric acid upon the ornamental (and especially metallic) parts of the chamber may be imagined For other purposes the proposal may be valuable Thus our correspondent records an experiment in which a very offensive public latrine was purged and made clean In another experiment the results distinctly showed a purifying effect upon the air It is conceivable that with special precautions the method could be applied to the air of public buildings with some advantage

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IN his letter to the press on behalf of the Metropolitan Hospital Sunday Fund the Lord Mayor refers to a matter to which attention has been called at meetings of the Metropolitan Hospital Sunday Fund—namely, the loss to charity by reason of many of the old and wealthy firms being turned into limited liability companies which have no power to contribute from their corporate income to purposes of charity It is, of course, no part of the duty of the directors of such companies to propose that any part of the dividends should be set aside for charitable purposes, but it is possible, and even probable, that if the Lord Mayor were to address a letter to such companies asking for subscriptions to the Fund the matter would be discussed at the meetings and a donation granted

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MR W M HAFFKINE, C I.E, was the guest of the Maccabæans at a dinner held on Monday last at the St. James's Restaurant under the chairmanship of Mr Meldola, F R.S Lord Lister who was present gave a brief but clear explanation of Mr Haffkine's methods of prophylactic inoculation against cholera and concluded his remarks with an eloquent expression of contempt for the unworthy persons who begrudge all sorts of success to members of the Jewish race.

AT Grosvenor House on Wednesday next the Duke of Westminster will present the Rev Canon Fleming B D with a testimonial which has been subscribed for by many of the well known clergyman's friends and admirers We are glad to learn of this recognition of Canon Fleming's splendid work and all who have the welfare of the sick at heart, remembering his efforts in behalf of the Metropolitan Hospital Sunday Fund, will share our feeling

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WE regret to announce the death at the early age of fifty-four years of Mr. Lawson Tait. He had not been in good health for some months, but the end was sudden and unexpected. We shall publish an obituary notice in an early issue.

T R H THE DUKE AND DUCHESS OF YORK will open the new building of the Royal London Ophthalmic Hospital in City road on Tuesday afternoon, June 27th, and not on June 26th, as previously arranged

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SIR WILLIAM MAC CORMAC has been elected an Honorary President of the Thirteenth International Congress of Medicine to be held in Paris from August 2nd to August 9th, 1900

WE desire to draw attention to an advertisement now appearing in our columns (p. 91) headed, "To the Benevolent" The case is a thoroughly deserving one.

CHOLERA in a severe form has broken out in Kurrachee The mortality has reached alarming figures, over 200 deaths per diem occurring during the week

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THE second annual conversazione of the Royal Society (ladies' night) will be held on Wednesday evening, June 21st, at Burlington House

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H.R.H. THE DUCHESS OF YORK will open the new Nurses' Home of Queen Charlotte's Hospital in the Marylebone road on July 17th

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ANNUAL REPORT OF THE SCOTTISH LOCAL GOVERNMENT BOARD

THE fourth annual report of the Local Government Board for Scotland has been issued It is divided into six parts—Poor law, Audit, Local Government Public Health, Vaccination, and Departmental. Under the first heading a summary is given of Sheriff Campbell's report on the conduct of officials in an outbreak of typhoid fever in South Uist It is in this outbreak that the then medical officer, Mr Lamont (whose persecution with regard to another matter has recently been so well exposed in the House of Commons by Sir Charles Cameron), figures not only prominently but heroically "He got no instructions, information, or guidance from the parish council or inspector as to the health or condition of the people or paupers He was on duty practically night and day, in frequent storms and rains over moors and across dangerous fords all over the parish, from the island of Eriskay in the south to the island of Benbecula in the north—38 miles apart Notwithstanding this he paid six visits to the deceased Mary McInnes during the 12 days she lived after his first visit He ministered to her professionally and in many menial services without aid and on her death he also practically unaided, prepared her body for interment under extraordinary and exceptional difficulties." Mr Lamont well deserves the "high appreciation of his conduct" formally recorded by the Local Government Board for Scotland

In the vaccination returns a very striking fact is the remarkably small part which public vaccination (in the sense of the Scottish Vaccination Act) plays in Scotland The total number of persons operated on by the official vaccinators in the year ending June 30th, 1898 was only 2173 in the whole country In the half year January to June, 1898, there were eight counties—some of them, it is true, very small counties—without a single official vaccination. It is not to be understood, however, that all the rest of the vaccinations in Scotland are done by medical men in their capacity of private practitioners. In the large towns there are

hospital It is not only in "ways that are dark and tricks that are vain" that the heathen Chinee is peculiar, but also in his methods of medicine. He possesses the notion that the devils of disease can be frightened away in the same way that young Hodge in England frightens away birds from the growing corn, hence the application to cure the plague by a wild procession through the infected quarter with shrieks and yells and a noise suggestive of an unloosed pandemonium According to the *China Mail* of May 9th the plague is more than recrudescent in many of the towns and villages of the delta In Canton and Fatshan it is reported as "bad" but not so bad as in some of the inland cities The city of San Ning might correctly be named at present "the city of death" The plague is raging with special virulence and carrying off its victims in large numbers Shops and dwelling houses are closed and their inhabitants have fled into the country Business is for the present paralysed The streets, meanwhile, are reeking in filth and all drains are choked with rubbish In one street no less than three mat sheds were erected, in which were seated in calm complacency many idols, which are implored to exert their power to stem and turn back the tide of death Almost every door is hung with branches of cactus or other thorny shrubs, a piece of fine netting, and a bag of small cockle-shells It is believed that the malignant devils cannot well avoid all these obstacles and enter the house If the devils yet attempt to enter they must pass through the mass of thorns but can scarcely avoid the small netting

THE DEVELOPMENT OF THE MOTOR CAR

THE fête held this week in the Tuileries Gardens at Paris appears to have been highly successful from the point of view of its promoters, and the flower decked cars combined with fine weather no doubt attracted a large concourse of sightseers France is admittedly ahead of us in the building of these vehicles and we note that a prominent feature of the fête was supplied by an electric car owned by M Tenetzy, which is cigar or torpedo shaped and is said to travel on a good road at any pace up to 65 miles an hour Even with the customary grain of salt necessary for the appreciation of novelties in our neighbours' locomotion, aerial, terrestrial, or submarine, 65 miles an hour is good going and most of us would be happier at a less startling pace We fail, however, to see that any substantial progress has been made towards perfecting a motor car of practical utility to the work a day man, who may perchance take a loving pride in his horse and trap, but to whom a higher rate of speed, or the same measure of usefulness at a less cost, would turn the scale in favour of the motor car Of all the professions the medical profession was the one from which inventors of horseless carriages might well expect support provided they could furnish them with what they needed It had to combine speed, simplicity, and cheapness, with moderate comfort in travelling Electricity, speedy and clean as it is, was and is still practically out of the question in most districts The provision of charging stations and the weight of accumulators for country by-roads in wet weather, besides the jar of a heavy vehicle moving rapidly over an uneven surface, were obstacles not to be easily overcome If all oil motors do not smell abominably we certainly meet many that do, while if their unsightliness is a matter of taste the weight of some of them is only too apparent, but at the same time their fuel is everywhere obtainable should the supply carried run short on an unexpectedly prolonged journey Meanwhile, all roads are not main roads, and those who travel for business and not for pleasure cannot always choose their way or their weather Motor cars can never be a fashionable craze with a horse loving people, and their practical usefulness, except perhaps as weight carriers on roads ascertained to be suitable, has yet to be demonstrated by a vehicle which has not, so far as we know, at present appeared

THE TEACHING OF PATHOLOGY AT OXFORD

FOR a long time the accommodation placed at the disposal of the teacher of pathology at the Oxford University has been inadequate to meet the requirements of the students attending the courses From time to time the University has been urged, first by Sir Henry Acland and more recently by Sir John Burdon Sanderson, to provide suitable laboratories, but the impoverished condition of the University chest has been such that although these proposals were sympathetically received the funds were not forthcoming Recently, however, the matter has been taken up with renewed energy owing to the kindness of an anonymous donor who has promised a sum of £5000 provided that within a certain date the University carries out the plan of the suggested laboratories Such a scheme entails the expenditure of £10,000 on buildings and the first stage was reached last Tuesday when Congregation passed a grant of £5,000 to supplement the sum already subscribed by the anonymous donor The circumstances of the vote were particularly pleasing, for whereas it was announced that opposition from various sources would be raised, the house, which was well attended, passed the decree without any discussion whatever At the same time an annual grant of £250 for upkeep and maintenance was passed without opposition In view of the friendly attitude of the University it is most probable that these decrees will be presented to Convocation during this term, and in all likelihood, if no opposition be encountered, building operations will be started in the long vacation. In little over a year's time Oxford will be provided with a pathological department second to none in regard to convenience of arrangement and fittings Already a further fund for the purchase of apparatus is being generously contributed to, so that in this respect also the laboratory will be well equipped

SEWER VENTILATORS

SEWER ventilators are an abomination but a necessity of the modern system of sanitation, so that any proposal to reduce the nuisance without interfering with the proper function of the ventilators will be welcomed Sir Charles Cameron has suggested employing porous cylinders as a kind of lid placed in the crown of the sewer As is well known, plaster of Paris or unglazed porcelain is sufficiently porous to allow of the escape of gas through the material While these cylinders therefore would allow air to pass freely through them they would effectually bar the passage of micro organisms and at the same time there would be no greater pressure in the sewer air than in the street atmosphere Indeed, the action is twofold, diffusion and filtration simultaneously taking place Air thus continuously comes out of the sewer filtered through the cylinders, and on well known principles of diffusion air as continuously enters the sewer through the porous vessel It is stated that this method has given satisfaction in Dublin and has proved effective, having been in use for the last two years, the porous ventilators being quite clean at the end of that time It is possible also that some amount of deodorisation is effected since the oxygen and putrefactive gases in passing through a porous material are brought into very intimate contact and the gaseous organic matters are thus oxidised We have had some evidence on this point in some experiments with coffins made of porous ware When the body of a dead rabbit was placed in a porous coffin and the latter was sealed with plaster of Paris there was hardly any evidence of the evolution of

benefit of the public What perhaps interested him most was the large number of general practitioners of all ages whom he saw present He reminded members of the legislature that the work which was proposed to be done was of no ordinary kind and was not taken up for the benefit of any individual or number of individuals The work had been taken up by reason of the fact that a large number of persons in the medical profession needed a certain amount of help owing to the great progress made by medicine in these days Medical education—long protracted as it now is—did not give a man the chance to acquire all he might wish to learn and within a few years the country practitioner felt himself to be behindhand. It would be the object of the College to enable such men to acquire in the easiest way new knowledge and technical skill

The Hon ALFRED LYTTLETON, M P, in an amusing speech responded for the two Houses

Sir JOHN LUBBOCK, in proposing "The Medical Graduates' College and Polyclinic," said that as a general rule when it was proposed to found a new institution the object was to give a stimulus to some languishing cause or because existing institutions had failed in their duties Neither of these reasons applied in the present case The existing colleges and hospitals were admirably and efficiently fulfilling the beneficent purposes for which they were constituted and it was their very success and the marvellous progress of medical science which had led to the formation of the Polyclinic College As evidence of progress he mentioned the invention of complex and ingenious instruments such as the stethoscope, the ophthalmoscope, the laryngoscope, the cardiograph, the sphygmograph, the pneumograph, and others Then there was the application to medicine of other physical appliances and discoveries, such as the clinical thermometer, the microtome, and the Roentgen rays, the discovery of many new and important drugs, the use of anæsthetics and the antiseptic treatment, the new modes of treatment, the operations which were formerly impossible, especially in brain and abdominal surgery There was also the discovery of sciences, or at any rate of new branches of science, such as antenatal pathology and bacteriology The mere mention of this list, he knew, very imperfectly showed the marvellous progress of medical science during the last half century Though the course of study had been prolonged from four to five years no student however diligent or able could hope to master in the time so vast a range of subjects But even if that were possible science was still advancing, new discoveries were being made new methods and new inventions were being devised, and in a few years the student would find himself left behind The aim of the Polyclinic College would be to facilitate the life-long education of medical men in all directions and to give them the opportunity of making themselves acquainted with all fresh discoveries It would contain a collection of instruments and appliances and a first rate library Special lectures would also be given within its walls All this could be effected in one central and special institution which would not come in conflict or competition with the various medical schools but which it was hoped would work in close association with them The arrangements of modern life and the rapidity of communication had made schemes now possible which would formerly have been out of the question Medical men resident in the country in all parts of England could easily make short visits to London and avail themselves of the opportunities which the College would afford It was hoped also that some would come from abroad and from our colonies It was also proposed to organise a certain number of daily consultations These would be open to all medical men who had joined the College, and they were designed for the double purpose of giving advice to patients and at the same time of affording medical men opportunities of becoming practically familiar with exceptional forms of disease and with the best and most modern methods of diagnosis It was not, however proposed to provide hospital accommodation or to undertake continuous treatment. In this matter the Polyclinic would act in concert and consultation with the hospitals and with private practitioners It would not compete with hospitals but to some extent supplement and assist their work The institution had been practically founded by Mr Hutchinson who was generously going to deposit in its museum his unique collection of clinical material and a splendid collection of books, and he was devoting to it much of his invaluable time It certainly seemed to him (the speaker) that this institution had been admirably devised and would be most useful His opinion, however, was worth little, but their opinion was worth much and they had shown it to be the same by their presence that evening With the toast he coupled the names of Sir William Broadbent and Mr Hutchinson

Sir WILLIAM BROADBENT, in his reply, said Sir John Lubbock had rated his judgment on the work of the medical profession as not of any practical value, as a matter of fact, however, the medical profession appreciated his judgment and the countenance which he had given to their work very highly and they could have no better judge The number of medical men present was a sufficient answer to the question, "Is this association likely to be of use?" and was a sufficient demonstration of the interest which it excited Wherever he went he heard of the value which general practitioners attached to the association, and it was most interesting to notice the zeal of the general practitioner for medical knowledge and his desire to keep up in every respect with the advances of medical science

Mr HUTCHINSON, in the course of a long and interesting speech, spoke warmly as to the benefits which would accrue to the community from the Polyclinic He said that Dr Ord, the chairman, and Sir William Broadbent had described the advantages of the institution to medical men and he would like to point out that this institution much concerned the public It was greatly in the interests of the public that the profession should be well educated and if a medical practitioner was willing to spare the time to keep himself abreast with the advance of knowledge the public ought to support him

Sir JOSEPH FAYRER, Bart, in proposing "The Medical Schools," looked forward to the time when the students at the medical schools of London would be considered as much undergraduates as if they belonged to the ancient universities and would eventually become graduates of the University of London

Dr STEPHEN MACKENZIE replied and other toasts concluded an enjoyable evening In the course of the proceedings subscriptions amounting to 4000 guineas were announced, including £1000 from Mr Hutchinson

ROYAL ARMY MEDICAL CORPS DINNER

THE annual dinner of the Royal Army Medical Corps took place at the Whitehall Rooms, Hotel Métropole, on June 12th, Surgeon General J JAMESON, C B, the Director-General, being in the chair There was a large attendance of officers and the evening proved a very pleasant and successful one After the toast of "The Queen" the CHAIRMAN, in an able and interesting speech, proposed "The Royal Army Medical Corps," this being the first occasion on which the officers of the medical service had met since their formation into a corps The toast was, of course, received with enthusiasm —Surgeon General O'DWYER gave "The Health of the Chairman" and alluded to the great services which the Director General had rendered in connexion with the reforms which had enabled them to become a Royal corps with army rank — Surgeon General JAMESON briefly acknowledged the compliment —Lieutenant-Colonel Hector, who again acted as honorary secretary of the dinner, is to be congratulated on the result of his labours

The following is a list of names of officers present *Surgeon Generals* J Jameson C B (Director-General), A F Bradshaw, C B, C McD Cuffe, C.B, A. A Gore, C B, R Harvey, C B, D S O, H S Muir, W Nash, T F O'Dwyer A F Preston, J B C Reade, C B, P B Smith, and W D Wilson *Colonels* W F Burnett, J A Clery, O Codrington, H. Comerford, W G Don, A. W Duke, T J Gallwey, C B, C A Innes, T Ligertwood W H Macnamara, C B, W T Martin, J Maturin, J L Notter, T O Farrell, and W F Stevenson *Lieutenant-Colonels* W H Allen W B Allin J F Beattie, G D Bourke, U J Bourke, A. L. Browne, W L Chester, A. F S Clarke, W Donovan, J D Edge, R Exham, J A. Gormley, W L Gubbins, J Hector, R D Hodgson, J P Hunt, W Johnston, W Keir, W W Kenny, H C Kirkpatrick, B W S Large, H Mackinnon, D S O, W A May, W Rainsford W F

public stations for gratuitous vaccination in connexion with hospitals and medical schools, &c , but these are not maintained under the Vaccination Act It is a little inconvenient to have to go to other official reports for the statistics of these public stations and of vaccination default in Scotland Could not all the facts be published in the one document? From a short report by Dr William Husband, superintendent of the Central Vaccine Institution for Scotland, it appears that 2591 tubes of humanised lymph were distributed to 423 practitioners and that six applications for calf lymph were received and acceded to As to calf lymph Dr Husband adds "It is satisfactory to know that the English Local Government Board have intimated their intention, when the necessary arrangements are completed, of furnishing us with a limited supply for distribution in Scotland"

In public health the Board has evidently had a busy year consequent on the coming into operation of the Public Health (Scotland) Act, 1897 It has issued circulars and model by laws and cholera regulations, &c , and has given advice to local authorities on many legal points On a much disputed question as to whether under Section 57 of the Scottish Public Health Act the medical officer of health is bound when called on to certify as to the freedom from infection of children who have recovered from infectious disease the Board indicates incidentally the reasonable opinion that it is only where he is "acquainted with the facts of the case" that a certificate can be expected from him On the question of the respective obligations of sanitary authorities and parish councils regarding pauper cases of infectious disease the Board says "In our opinion the parish council is bound to treat cases of infectious disease occurring among paupers or proper objects of parochial relief The Public Health Act does not relieve them of that obligation and their liability continues But when a local authority, acting under the Public Health Act and for the protection of the public health, remove or isolate the patient all the expenses necessarily incurred for this purpose form a charge against the public health assessment and cannot be recovered from any other person or body" Under Section 65 of the recent Act by laws may be framed for securing the cleanliness and sanitary condition of public conveyances *plying within the district* of the local authority, and for preventing overcrowding in such conveyances Among the by laws under this section submitted to the Board for confirmation were two applicable to railway carriages The law officers of the Crown advised the Board that railway carriages were not included in "public conveyances" under the Act, "but the local authority after reconsideration submitted new by laws which applied to public conveyances generally without distinction, thus leaving open the question of their applicability to railway carriages" By Section 39 of the new Act, sanitary authorities can compel owners of private streets within special scavenging districts to level and pave such streets, and the Board's report gives very useful guidance as to the administration of this most important section With regard to hospitals the report says "The fact that we are now armed with compulsory powers under Section 44 of the Act has enabled us to give an impetus to hospital provision Wherever we found that a medical officer of health in his annual report had been urging hospital accommodation for his district we gave the matter special attention and where we thought it advisable seconded the efforts of the medical officers, reminding the local authority of our powers under the aforesaid section" On the subject of the employment of nurses for attending persons suffering from infectious diseases in their own homes the Board points out that only its general sanction is required, because to require consent in each case would often frustrate the object in view—the immediate and thorough isolation of the patient It also indicates that the employment of such nurses is not to be regarded as a substitute for the provision of hospitals In one or two sparsely populated Highland districts a one year's experiment is, however, being made of the employment of nurses and the medical officer of health is to report to the Board at the end of the year, so that if the result be satisfactory they may be prepared to consider further schemes on a larger basis, as they think that "within reasonable limits the larger the number of local authorities which combine for fever nursing the less will be the difficulty in meeting demands which may suddenly arise" With regard to an outbreak of typhus fever in Skye the local medical officer, Dr Dewar, "reports that even at mid day there was so little light that he was obliged to find the patients by means of match light The small fixed windows were grimy with dirt and smoke. For six weeks before his visit the whole family of six had been living solely on mashed potatoes and tea, partaken of three times a day Comparing this outbreak with previous outbreaks he found the condition and surroundings practically identical. These were—overcrowding, want of ventilation, filth, and poverty" Only 28 cases of small pox were notified in Scotland during 1898 The following table shows the prevalence and fatality of notified infectious disease in an aggregate population of 3,763,579 being that of 228 local authorities which had adopted the Notification Act in 1897 —

Diseases Specified in the Act

—	Cases notified.	Deaths.	Percentage of deaths to notifications in 1897
Small pox..	80	8	10·0
Cholera ..	1	—	—
Diphtheria	2,532	505	19·9
Membranous croup ..	185	76	41 1
Erysipelas ...	4 014	128	3·2
Scarlet fever	19,716	631	3·2
Typhus fever ..	159	28	17·6
Enteric fever	3,911	614	15·7
Relapsing fever	9	—	—
Continued fever	113	7	6 2
Puerperal fever	228	108	47·4
Total	30,948	2105	6·8
Diseases to which the Act has been Extended			
Measles	15,058	433	2·9
Whooping-cough ..	534	107	20·0
Choleraic diarrhœa	3	—	—
British cholera	—	—	—
Total ..	15,595	540	3·5
Grand total of both classes	46,543	2645	5·7

A table of the salaries of medical officers of health in Scotland contains some curious figures 16 burghs appear to have no medical officers of health but these are no doubt only temporary vacancies In four burghs the salary is £1 per annum, in two it is £1 1*s* , in one it is 25*s* , in another it is 30*s* , and in 17 it is £2 or £2 2*s* It may be assumed that these are very small burghs but they are surely not so very microscopic as to justify the payment of such ridiculous pittances to their health officers

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC

NEARLY 300 gentlemen representing all grades of the medical profession assembled under the presidency of Sir JOHN LUBBOCK, Bart, M P , at the Trocadéro Restaurant on Wednesday evening last, the occasion being the inaugural dinner of the Medical Graduates' College and Polyclinic

The toast of "The Queen" and also that of "The Prince and Princess of Wales and other Members of the Royal Family" having been honoured Dr W MILLER ORD proposed "The Houses of Parliament" He regretted the unavoidable absence of Lord Lister who had written a letter to Mr Hutchinson expressing his cordial approval of and hopes of prosperity for the College, and remarked on the number of men whom he saw before him representing the profession in varied interests and paths He saw before him distinguished representatives of the medical services, the navy, and the army, and scientific men engaged in various kinds of medical research which advanced science in one way and helped the medical man in another, and together helped greatly the advancement of legislation for the

	£	s.	d.
Hatfield Parish Church and Chapel	21	10	3
St. Peter Highgate-hill	23	0	0
St. John Baptist, Chislehurst	22	19	3
Upper Holloway Baptist Chapel	26	13	3
Dulwich College, with additions	82	0	0
Lewisham High road Congregational Church.	20	0	0
Ilford Parish Church and Chapels	33	3	6
Chipping Barnet Parish Church	35	14	10
Crouch hill Presbyterian Church	46	1	0

The records of other amounts have been received and will be published in our next issue

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Liverpool Urban District—Dr E W Hope's annual report just published is a comprehensive volume of more than 200 pages It is illustrated by maps, diagrams, and photographs and contains the results of analyses and inspections The report comprises a preface summarising the main features of the volume and is of great value in referring readers for detailed information on specific points The estimated population of Liverpool is 668 645, and the total number of deaths at all ages and from all causes during the year 1898 was 15 380 which represents an annual rate of mortality equal to 23 per 1000 of the inhabitants The total deaths, however, were not all deaths of residents in the city Liverpool is a large medical centre and is well provided with hospitals dispensaries, and other medical charities which attract patients from a very wide surrounding area and the death of every stranger to the city which occurs in any one of these institutions is included amongst the deaths of citizens and increases the apparent rate of mortality in the city When these have been verified and deducted the annual rate of mortality is reduced to 22 2 per 1000 This death rate is the lowest, with one single exception (1898) which has ever been recorded in the city of Liverpool and represents a reduction of 1 per 1000 below the average of the four years since the extension of the city boundaries The reduction in the rate of mortality shows itself in each of the 11 districts of the city, with the exception of Walton, which was exceedingly low in 1897 and stood at precisely the same figure in 1893 It will be seen that while there was a reduction in the death rate it is only from certain causes that the number of deaths had undergone any conspicuous diminution, these causes being due to the efforts of the sanitary authority Foremost amongst these is the group of zymotic diseases, in which the steady decline of previous years has been more than maintained The most marked decline was in those forms of zymotic disease which it has been possible to treat and to isolate in hospitals Scarlet fever may be instanced as showing how readily, and to what an increasing extent the public have availed themselves of this accommodation Amongst the forms of zymotic disease for which no hospital accommodation is provided and which are usually regarded as the less serious forms (such as measles, whooping-cough, and diarrhœa) the diminution is relatively inconsiderable The remarkable diminution in deaths from various forms of tuberculous disease is not less conspicuous than the foregoing One of the most remarkable as well as gratifying features in regard to this disease is the great diminution in the rate of mortality in the very early years of life from the forms of tuberculous disease peculiar to those ages This diminution does not appear to have been shared in throughout the country generally Small pox and typhus fever have become comparatively rare. In the section of the report dealing with sanitary administration it will be seen that various additions have been made to the medical officer of health s staff The rule which requires candidates to possess a certificate or equivalent evidence that their previous occupation has fitted them for the duties which they will be called upon to discharge had been strictly adhered to and with much benefit It is not only important that candidates should possess certificates it is equally important that they should be properly taught and it is this consideration which had led the Liverpool City Council to give its support to the school of hygiene in University College where full and complete preliminary training can be obtained by those who desire to become inspectors in any branch of the medical officer's staff With regard to matters affecting house sanitation the number of applications for assistance made by the public increases every year, they relate in the main to jerry built property or old and worn out insanitary property Systematic house to-house visitation was carried out by the district staff, both male and female, and special attention was given to the miserable class of property known as courts and alleys Interchange of information between the medical department and the other departments had considerably increased, except in the case of the references to the School Board, which, owing to the diminution in infectious cases, fell from 15,000 to 11,000 With regard to the female sanitary staff it is worth noting that there was a very large increase in the number of families visited and a considerable diminution in the proportion reported as dirty Ignorance of the language interposed a serious barrier to the efforts to improve the condition of the foreign Jews, chiefly Polish and Russian Important and responsible duties were carried out by the ambulance and disinfecting staff, no less than 2387 patients were removed to hospital, and the consequent disinfection of houses, bedding clothing, &c, had been attended with very satisfactory results The cleansing of infected premises under a £30 rental was also undertaken by men connected with that branch of the staff Under the Food and Drugs Act a great variety of samples had been taken for chemical and bacteriological analysis. The various brands of what is known as condensed milk had been completely examined and a considerable variety had been found in their composition As in preceding years, considerable attention had been paid to the sources of the milk supply In comparing the number of samples of town milk with the number of samples of country milk found to be contaminated with tubercle it must be remembered that the town samples were chiefly taken from suspected sources, whereas the country samples were taken as they came without selection The surveillance that is now maintained over shippons within the city had produced excellent results Dr Hope reports that 11,000 gallons of milk were brought into Liverpool every day from the country and about 12,000 gallons more were provided within the town shippons Analysis showed that the town milk was purer and the town cows more healthy than was the case in the country, facts due to the better sanitary conditions which had been brought about by the inspection of shippons within the city The demolition of insanitary property had proceeded gradually, the number of courts and alleys is at present 1466, as against 1660 in 1895 There is a very large amount of property which is so constructed as to be destructive to the health and the life of those living in it—pent-up, airless and sunless, ruinously dilapidated, and saturated with filth It is not surprising to find the general rate of mortality in it from year's end to year's end, rising to 60 per 1000 The deaths were chiefly amongst the infants, but the general condition of the inhabitants was in every way deplorable Considerable benefit had attended the improvements in the system of cleansing and scavenging, the increased use of water for street washing had resulted in conspicuous good, and the inverse ratio between the autumnal diarrhœa and the rainfall or water used in street washing is very remarkable. Fair progress had been made during the year towards the provision of adequate hospital accommodation for persons suffering from infectious diseases The present number of beds available for the various forms of infectious sickness is as follows City Hospital North, 147 beds, City Hospital South 88 beds, City Hospital East, 42 beds, Parkhill Hospital 166 beds, and Priory road Hospital 37 beds, making a total of 480 beds They are apportioned as follows small pox, 37 beds, typhus fever 20 beds; typhoid fever, 75 beds, scarlet fever 288 beds, and diphtheria, 30 beds There are also 30 beds for isolation purposes 100 of these beds are located in buildings of a temporary character which are practically worn out and at no distant date will require to be taken down At the lowest computation based upon a wide experience and embodied in the recommendations of the Local Government Board Liverpool requires a minimum of 650 beds for ordinary infectious sickness and 100 beds for small pox Towards the close of last year the medical officer reported to the hospitals committee the great difficulty

Ruttledge, M R Ryan, P B. Tuthill, O G Wood, and T W Wright *Majors* W Babtie, C M G, M W Baker, W G A Bedford, M O'D Braddell, C H Burtchaell, A M Davies, J, D Day, A Dodd, S F Freyer, H Grier, F A. Harris, E M Hassard, H Hathaway, J Hickman, S Hickson, G Hilliard, C M G, H E R James, R Jennings, O R A Julian, R E Kelly, A Keogh, S F Lougheed, H J McLaughlin, W J Macnamara, W G Macpherson, H J Moberly, J D Moir, A H Morgan, F J Morgan, E North, D M O'Callaghan, T J O'Donnell, E V A Phipps, W Pope, M W Russell, A A Sutton, G T H Thomas, F H Treherne, G T Trewman, S Westcott, and E M Wilson, C M G, D S O *Captains* K B Barnett, T B Beach, H J M Buist, H E Dowse, H G Faichnie, M L Hughes, J O Jameson, S G Moores, E M Pilcher, C W Profeit, P H Whiston, L Way, and E. McK Williams. *Guests* Mr Vesey Holt, Mr Thomas Wakley, jun, and Dr Dawson Williams The Director-General of the Medical Department of the Royal Navy and the President of the Indian Medical Board were also invited but were unable to be present

INDIAN MEDICAL SERVICE DINNER

THE annual dinner of the officers of the Indian Medical Service was held at the Hotel Cecil on June 8th, Surgeon-General Sir W GUYER HUNTER, K C.M G, being in the chair The occasion is always a pleasant one and this year its reputation was fully maintained At the conclusion of an excellent dinner and after the usual loyal toasts had been honoured "The Navy and Army" was proposed by Dr W S PLAYFAIR and responded to by Sir HENRY F NORBURY, K C B, Director General of the Royal Navy Medical Service, and Surgeon General J JAMESON, C B, Director General of the Army Medical Service The health of "The Guests" was given by Surgeon General Sir JOSEPH FAYRER, Bart, K C S I, and acknowledged by Mr BRYANT, President of the Royal Medical and Chirurgical Society "The Indian Medical Service" was proposed by Mr EDMUND OWEN, late President of the Medical Society of London, and responded to by the CHAIRMAN and Surgeon General HARVEY C B, D S O Director General of the Indian Medical Service The CHAIRMAN expressed the thanks of the meeting to Surgeon Lieutenant-Colonel P J Freyer for his successful efforts as honorary secretary of the dinner, and that gentleman suitably responded The various speeches were interesting and to the point

The following is a list of the names of the officers who were present —*Surgeon Generals* Sir W Guyer Hunter, K C M G (chairman), Sir Joseph Fayrer, Bart, K C S I, F R S, R Harvey, C B, D S O (Director General I M S); A. C C De Renzy, C B, W R Rice, C S I, and P W Sutherland Dr W S Playfair and Dr H W G Macleod (retired officers I M S) *Colonels* A M Branfoot, W E Cates, H Cayley, C P Costello, D A Hughes, J C Penny, A Porter, W H Roberts, B Williamson, and W A S Wynne *Lieutenant-Colonels* H Armstrong, Oswald Baker, W Cadge, J W Clarkson, A Crombie, A Dane, E J Drake Brockman, Theodore Duka, G A Emerson, P J. Freyer, J C Fullerton, G Grant, D B Keegan J B Lyon, C I E, J Maitland, G Massy, H K McKay, J Parker, J Reid, G D Riddell, J B Scriven, J G Skardon, G S Sutherland, W H Thornhill, and A H. Williamson *Majors* W S Caldwell, F Carter, G N P Dennys, A S Faulkner, C Gilbert, S Hassan, P Hehir, H Herbert, R S Lyons, P D Pank F Peck, F G Reeves, J Scott, H W Stevenson J F Tuohy, and D P Warliker *Captains* J T Calvert, K H Caster, H E Drake-Brockman, G Ramsey, R F Standage, R. G Turner, and C J R Whitcombe *Lieutenant* J N Smith

factory they may [illegible] —At the meeting of the on a larger basis, as the [illegible]ld on June 7th it was decided able [illegible] the larger the num[illegible] Mr W Wickham, [illegible]ne for fever nursing the [illegible]ng Newnton, [illegible] meeting demands which may such [illegible] 5s, and [illegible] to an outbreak [illegible]

VACCINATION [illegible] Tetbury Board of Guardians has [illegible]dmarton, to allow the following vaccinatio[illegible]s each for Burston, Cherington Shipton [illegible] for Tetbury an[illegible] each case, for Boxwell, [illegible]hdown, for Bagpath, [illegible] 6d

METROPOLITAN HOSPITAL SUNDAY FUND

THE following is a record of some of the principal amounts received at the Mansion House, according to the lists which have reached THE LANCET Office up to the time of going to press on Thursday, when the total sum amounted to over £22,000 At the corresponding period last year the total was £14,000

	£	s	d.
St. Paul's Cathedral	239	12	0
St. Michael Chester-square ..	1333	0	0
W D G M.	100	0	0
Fredk Druce	25	0	0
Herman Hoskier	50	0	0
Alex Miller	25	0	0
Miss Emily Old	25	0	0
F F"	30	0	0
Vintners Company	21	0	0
St Mary Boltons ..	65	0	0
In Memoriam (Crosby Lockwood) ..	20	0	0
Finchley Parish Church ..	39	1	5
St. Mary Hospital Chapel Ilford	25	12	8
St. James, Camberwell	28	2	0
St. Philip's Regent-street ..	27	16	4
St. Mary Cuddington ..	37	10	9
Trinity Presbyterian Church Hampstead ..	32	10	0
Church of the Immaculate Conception Farm street	46	1	10
St. Luke, West Norwood	28	16	0
St. Mary Parish Church Putney	42	0	0
St. Mary Old Church, Stoke Newington	45	5	2
St. Mary Brookfield, Dartmouth park	20	0	5
Sir Charles Cust Bart ..	20	0	0
St. Stephen, Westminster	23	16	10
All Saints, Friern Barnet	42	14	11
Upton Baptist Chapel, Lambeth	21	17	0
Clapton park Baptist Chapel	34	9	7
St. Giles, Camberwell	22	0	6
St. Paul Upper Holloway ..	26	0	11
St. Peter Clapham	23	9	11
Brixton Independent Church ..	53	12	9
St John Evangelist, Westminster	45	10	0
Union Chapel Islington ..	150	0	0
St. George's Chapel Albemarle-street	84	6	3
St. Matthew, Denmark hill	161	13	3
Aldenham Parish Church ..	100	18	0
Old Malden Parish Church	71	1	10
Merton Parish Church and Mission Hall	31	5	10
J J Randolph ..	20	0	0
St. George Beckenham ..	60	12	11
St. Mary, Shortlands.	35	11	6
St Mary Magdalene, Wandsworth Common	24	7	11
St. John's Presbyterian Church Kensington	82	0	0
St. Saviour Ealing	20	10	4
All Saints Norfolk-square	30	0	0
Dulwich College Chapel ..	51	10	0
C H T Hawkins	21	0	0
St James Clapton ..	26	8	7
St Augustine Highbury New Park ..	56	2	10
St. Augustine Queen's-gate	87	5	0
East London Christian Evidence Society ..	81	10	0
Holy Trinity, Upper Tooting	42	18	6
Trinity Presbyterian Church Notting hill ..	46	12	0
Christian Evidence Society's East London Branch ..	34	11	6
St. George's Presbyterian Church Brondesbury	27	10	0
Bromley Mildcross Parish Church and Mission	23	0	0
Grosvenor Chapel South Audley-street	32	0	11
St. James, Garlickhithe	25	13	4
St. Mary Enfield ..	27	15	7
Finsbury Park Wesleyan Church	22	2	10
Mitcham Parish Church	28	2	7
St Mary West Kensington ..	26	1	6
Ewell Park Church and All Saints	28	4	3
Box outside Mansion House ..	20	14	4
Chislehurst Parish Church	337	11	7
Westminster Abbey	206	13	1
J R S ..	100	0	0
Major Jones ..	50	0	0
St. Luke, Chelsea, Parish Church	59	3	11
Bromley (Kent) Parish Church ..	64	1	8
St. Mark's Bromley Kent ..	33	15	5
St James the Less, Westminster	32	14	7
St. Mary the Virgin, Hayes	30	15	3
Chiswick Parish Church	35	6	5
St. Simon, Upper Chelsea ..	45	7	6
Highgate Presbyterian Church	37	3	7
Holy Trinity Lee	32	0	0
Orpington Parish Church and St. Paul's ..	37	11	4
Regent's Park Baptist Chapel	41	7	2
Christ Church Newgate-street	38	17	4
St. Paul Winchmore Hill	20	7	5
Archway road Wesleyan Chapel	25	11	6
St. Anne Wandsworth	33	0	0
St. Saviour Paddington ..	55	8	2
Brixton Wesleyan Circuit ..	56	19	0
St. Mark Reigate	73	19	0
Christ Church Hornsey ..	52	1	4
Church of the Annunciation, Chislehurst ..	83	4	5
St. Andrew, Leytonstone	63	2	9
Leytonstone Congregational Church	24	5	2
St. Thomas and Mission Stamford hill ..	21	4	6
St Saviour Denmark park ..	25	3	5

	£	s.	d.
Hatfield Parish Church and Chapel	21	10	3
St Peter Highgate-hill	23	0	0
St. John Baptist, Chislehurst	22	19	3
Upper Holloway Baptist Chapel	26	13	3
Dulwich College, with additions	52	0	0
Lewisham High road Congregational Church	20	0	0
Ilford Parish Church and Chapels	33	3	6
Chipping Barnet Parish Church	35	14	10
Crouch hill Presbyterian Church	46	1	0

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF MEDICAL OFFICERS OF HEALTH

Liverpool Urban District—Dr E W Hope s annual report just published is a comprehensive volume of more than 200 pages It is illustrated by maps, diagrams, and photographs and contains the results of analyses and inspections The report comprises a preface summarising the main features of the volume and is of great value in referring readers for detailed information on specific points The estimated population of Liverpool is 668 645, and the total number of deaths at all ages and from all causes during the year 1898 was 15,380 which represents an annual rate of mortality equal to 23 per 1000 of the inhabitants The total deaths, however, were not all deaths of residents in the city Liverpool is a large medical centre and is well provided with hospitals, dispensaries, and other medical charities which attract patients from a very wide surrounding area and the death of every stranger to the city which occurs in any one of these institutions is included amongst the deaths of citizens and increases the apparent rate of mortality in the city When these have been verified and deducted the annual rate of mortality is reduced to 22 2 per 1000 This death rate is the lowest, with one single exception (1896), which has ever been recorded in the city of Liverpool and represents a reduction of 1 per 1000 below the average of the four years since the extension of the city boundaries The reduction in the rate of mortality shows itself in each of the 11 districts of the city, with the exception of Walton, which was exceedingly low in 1897 and stood at precisely the same figure in 1898 It will be seen that while there was a reduction in the death rate it is only from certain causes that the number of deaths had undergone any conspicuous diminution, these causes being due to the efforts of the sanitary authority Foremost amongst these is the group of zymotic diseases, in which the steady decline of previous years has been more than maintained The most marked decline was in those forms of zymotic disease which it has been possible to treat and to isolate in hospitals Scarlet fever may be instanced as showing how readily, and to what an increasing extent the public have availed themselves of this accommodation Amongst the forms of zymotic disease for which no hospital accommodation is provided and which are usually regarded as the less serious forms (such as measles, whooping-cough, and diarrhœa) the diminution is relatively inconsiderable The remarkable diminution in deaths from various forms of tuberculous disease is not less conspicuous than the foregoing One of the most remarkable as well as gratifying features in regard to this disease is the great diminution in the rate of mortality in the very early years of life from the forms of tuberculous disease peculiar to those ages This diminution does not appear to have been shared in throughout the country generally Small pox and typhus fever have become comparatively rare In the section of the report dealing with sanitary administration it will be seen that various additions have been made to the medical officer of health s staff The rule which requires candidates to possess a certificate or equivalent evidence that their previous occupation has fitted them for the duties which they will be called upon to discharge had been strictly adhered to and with much benefit It is not only important that candidates should possess certificates It is equally important that they should be properly taught and it is this consideration which had led the Liverpool City Council to give its support to the school of hygiene in University College where full and complete preliminary training can be obtained by those who desire to become inspectors in any branch of the medical officer's staff. With regard to matters affecting house sanitation the number of applications for assistance made by the public increases every year, they relate in the main to jerry-built property or old and worn out insanitary property Systematic house-to-house visitation was carried out by the district staff, both male and female, and special attention was given to the miserable class of property known as courts and alleys Interchange of information between the medical department and the other departments had considerably increased, except in the case of the references to the School Board, which, owing to the diminution in infectious cases, fell from 15,000 to 11,000 With regard to the female sanitary staff it is worth noting that there was a very large increase in the number of families visited and a considerable diminution in the proportion reported as dirty Ignorance of the language interposed a serious barrier to the efforts to improve the condition of the foreign Jews, chiefly Polish and Russian Important and responsible duties were carried out by the ambulance and disinfecting staff; no less than 2387 patients were removed to hospital, and the consequent disinfection of houses, bedding clothing, &c , had been attended with very satisfactory results The cleansing of infected premises under a £30 rental was also undertaken by men connected with that branch of the staff Under the Food and Drugs Act a great variety of samples had been taken for chemical and bacteriological analysis. The various brands of what is known as condensed milk had been completely examined and a considerable variety had been found in their composition As in preceding years, considerable attention had been paid to the sources of the milk supply In comparing the number of samples of town milk with the number of samples of country milk found to be contaminated with tubercle it must be remembered that the town samples were chiefly taken from suspected sources, whereas the country samples were taken as they came without selection The surveillance that is now maintained over shippons within the city had produced excellent results Dr Hope reports that 11,000 gallons of milk were brought into Liverpool every day from the country and about 12,000 gallons more were provided within the town shippons Analysis showed that the town milk was purer and the town cows more healthy than was the case in the country, facts due to the better sanitary conditions which had been brought about by the inspection of shippons within the city The demolition of insanitary property had proceeded gradually, the number of courts and alleys is at present 1466, as against 1660 in 1895 There is a very large amount of property which is so constructed as to be destructive to the health and the life of those living in it—pent-up, airless, and sunless, ruinously dilapidated, and saturated with filth It is not surprising to find the general rate of mortality in it, from year's end to year's end, rising to 60 per 1000 The deaths were chiefly amongst the infants, but the general condition of the inhabitants was in every way deplorable Considerable benefit had attended the improvements in the system of cleansing and scavenging, the increased use of water for street washing had resulted in conspicuous good, and the inverse ratio between the autumnal diarrhœa and the rainfall or water used in street washing is very remarkable. Fair progress had been made during the year towards the provision of adequate hospital accommodation for persons suffering from infectious diseases The present number of beds available for the various forms of infectious sickness is as follows City Hospital North, 147 beds, City Hospital South 88 beds, City Hospital East, 42 beds, Parkhill Hospital, 166 beds, and Priory road Hospital 37 beds, making a total of 480 beds They are apportioned as follows small pox, 37 beds, typhus fever, 20 beds, typhoid fever, 75 beds, scarlet fever 288 beds, and diphtheria, 30 beds There are also 30 beds for isolation purposes 100 of these beds are located in buildings of a temporary character which are practically worn out and at no distant date will require to be taken down At the lowest computation based upon a wide experience and embodied in the recommendations of the Local Government Board, Liverpool requires a minimum of 650 beds for ordinary infectious sickness and 100 beds for small pox Towards the close of last year the medical officer reported to the hospitals committee the great difficulty

Ruttledge, M R Ryan, P B Tuthill, O G Wood, and T W Wright *Majors* W Babtie, C M G, M W Baker, W G A Bedford, M O'D Braddell, C H Burtchaell, A M Davies, J D Day, A Dodd, S F Freyer, H Grier, F A Harris E M Hassard, H Hathaway, J Hickman, S Hickson, G Hilliard, C M G, H E R James, R Jennings, O R A Julian, R E Kelly, A Keogh, S F Lougheed, H J McLaughlin, W J Macnamara, W G Macpherson, H J Moberly, J D Moir, A H Morgan, F J Morgan, E North, D M O'Callaghan, T J O'Donnell, E V A Phipps, W Pope, M W Russell, A. A. Sutton, G T H. Thomas, F H Treherne, G T Trewman, S Westcott, and E M Wilson, C M G, D S O *Captains* K B Barnett, T B Beach, H J M Buist, H E Dowse, H G Faichnie, M L Hughes, J C Jameson, S G Moores, E M Pilcher, C W Profeit, P H Whiston, L Way, and E McK Williams *Guests.* Mr Vesey Holt, Mr Thomas Wakley, jun, and Dr Dawson Williams The Director-General of the Medical Department of the Royal Navy and the President of the Indian Medical Board were also invited but were unable to be present

INDIAN MEDICAL SERVICE DINNER

THE annual dinner of the officers of the Indian Medical Service was held at the Hotel Cecil on June 8th, Surgeon General Sir W GUYER HUNTER, K C M G, being in the chair The occasion is always a pleasant one and this year its reputation was fully maintained At the conclusion of an excellent dinner and after the usual loyal toasts had been honoured "The Navy and Army" was proposed by Dr W S PLAYFAIR and responded to by Sir HENRY F NORBURY, K C B, Director General of the Royal Navy Medical Service, and Surgeon General J JAMESON, C B, Director General of the Army Medical Service The health of "The Guests" was given by Surgeon General Sir JOSEPH FAYRER, Bart, K C S I, and acknowledged by Mr BRYANT, President of the Royal Medical and Chirurgical Society "The Indian Medical Service" was proposed by Mr EDMUND OWEN, late President of the Medical Society of London, and responded to by the CHAIRMAN and Surgeon General HARVEY, C B, D S O Director General of the Indian Medical Service The CHAIRMAN expressed the thanks of the meeting to Surgeon Lieutenant-Colonel P J Freyer for his successful efforts as honorary secretary of the dinner, and that gentleman suitably responded The various speeches were interesting and to the point

The following is a list of the names of the officers who were present —*Surgeon Generals* Sir W Guyer Hunter, K.C M G (chairman), Sir Joseph Fayrer, Bart, K C S I, F R S, R Harvey, C B, D S O (Director General I M S); A C C De Renzy, C B, W R Rice, C S.I, and P W Sutherland Dr W S Playfair and Dr H W G Macleod (retired officers I M S) *Colonels* A M Branfoot, W E Cates, H Cayley C P Costello, D A Hughes, J C Penny, A Porter, W H Roberts, B Williamson, and W A S Wynne *Lieutenant Colonels* H Armstrong, Oswald Baker, W Cadge, J W Clarkson, A Crombie, A Dane, E J Drake Brockman, Theodore Duka, G A Emerson, P J. Freyer, J C Fullerton, G Grant, D F Keegan, J B Lyon, C I E, J Maitland, G Massy, H K McKay, J Parker, J Reid, G D Riddell, J B Scriven, J G Skardon, G S Sutherland, W H Thornhill, and A H. Williamson *Majors* W S Caldwell, F Carter, G. N P Dennys, A S Faulkner, C Gilbert, S Hassan, P Hehir, H Herbert, R S Lyons, P D Pank, F Peck, F G Reeves, J Scott, H W Stevenson J F Tuohy, and D P. Warliker *Captains* J T Calvert, K H Caster, H E Drake-Brockman, G Ramsey, R F Standage, R G Turner, and C J R Whitcombe *Lieutenant* J N Smith

factory they may [illegible] —At the meeting of the on a larger basis, as the [illegible] ld on June 7th it was decided able [illegible] the larger the num[illegible] Mr W Wickham, W [illegible] ne for fever nursing the [illegible] ng Newnton, di[illegible] meeting demands which may sud[illegible] 5s, and Wi[illegible] to an outbreak- [illegible] loca[illegible] er, P [illegible] day

VACCINATION

Tetbury Board of Guardians has [illegible] to allow the following vaccinatidmarton, for Burston, Oberington, Shipton [illegible] each each case, for Tetbury an[illegible] for Boxwell, [illegible] shdown, for Bagpath, [illegible] 6d

METROPOLITAN HOSPITAL SUNDAY FUND

THE following is a record of some of the principal amounts received at the Mansion House, according to the lists which have reached THE LANCET Office up to the time of going to press on Thursday, when the total sum amounted to over £22,000 At the corresponding period last year the total was £14,000

	£	s	d.
St. Paul's Cathedral	249	12	0
St. Michael Chester-square	1333	0	0
W D G M."	100	0	0
Fredk Druce	25	0	0
Herman Hoskier	50	0	0
Alex Miller	25	0	0
Miss Emily Old	25	0	0
"F F"	30	0	0
Vintners Company	21	0	0
St. Mary Boltons	65	0	0
In Memoriam (Crosby Lockwood)	20	0	0
Finchley Parish Church	39	1	5
St. Mary Hospital Chapel Ilford	25	12	8
St. James, Camberwell	28	2	0
St. Philip's Regent-street	27	16	4
St. Mary Cuddington	37	10	9
Trinity Presbyterian Church Hampstead	32	10	0
Church of the Immaculate Conception Farm street	46	1	10
St. Luke, West Norwood	28	16	0
St. Mary Parish Church Putney	42	0	0
St. Mary Old Church, Stoke Newington	45	5	2
St. Mary Brookfield Dartmouth park	20	0	5
Sir Charles Cust Bart.	20	0	0
St. Stephen, Westminster	23	16	10
All Saints, Friern Barnet	42	14	11
Upton Baptist Chapel, Lambeth	21	17	0
Clapton park Baptist Chapel	34	9	7
St. Giles, Camberwell	22	0	6
St. Paul Upper Holloway	26	0	11
St. Peter Clapham	23	9	11
Brixton Independent Church	53	12	9
St John Evangelist, Westminster	45	10	0
Union Chapel, Islington	150	0	0
St. George's Chapel, Albemarle-street	84	6	3
St. Matthew, Denmark hill	161	13	3
Aldenham Parish Church	100	18	0
Old Malden Parish Church	71	1	10
Merton Parish Church and Mission Hall	31	5	10
J J Randolph	20	0	0
St. George Beckenham	60	12	11
St Mary, Shortlands	35	11	6
St Mary Magdalene, Wandsworth Common	24	7	11
St. John's Presbyterian Church Kensington	82	0	0
St. Saviour Ealing	20	10	4
All Saints Norfolk square	30	0	0
Dulwich College Chapel	51	10	0
C H T Hawkins	21	0	0
St James Clapton	26	8	7
St Augustine Highbury New Park	56	2	10
St. Augustine Queen's gate	87	5	0
East London Christian Evidence Society	81	10	0
Holy Trinity Upper Tooting	42	18	6
Trinity Presbyterian Church Notting hill	46	12	0
Christian Evidence Society's East London Branch	34	11	6
St George's Presbyterian Church Brondesbury	27	10	0
Bromley Midcross Parish Church and Mission	23	0	0
Grosvenor Chapel South Audley-street	32	0	11
St James, Garlickhithe	25	13	4
St. Mary Enfield	27	15	7
Finsbury Park Wesleyan Church	22	2	10
Mitcham Parish Church	28	2	7
St Mary, West Kensington	26	1	6
Ewell Park Church and All Saints	28	4	3
Box outside Mansion House	20	14	4
Chislehurst Parish Church	337	11	7
Westminster Abbey	205	13	1
J R S'	100	0	0
Major Jones	50	0	0
St. Luke Chelsea, Parish Church	59	3	11
Bromley (Kent) Parish Church	64	1	8
St. Mark's Bromley Kent	33	15	5
St. James the Less Westminster	32	14	7
St. Mary the Virgin, Hayes	30	15	3
Chiswick Parish Church	35	6	5
St Simon, Upper Chelsea	45	7	6
Highgate Presbyterian Church	37	3	7
Holy Trinity, Lee	32	0	0
Orpington Parish Church and St. Paul's	37	11	4
Regent's Park Baptist Chapel	41	7	2
Christ Church Newgate-street	38	17	4
St. Paul Winchmore Hill	20	7	5
Archway road Wesleyan Chapel	25	11	6
St. Anne Wandsworth	33	0	0
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St. Andrew Leytonstone	63	2	9
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	£	s.	d.
Hatfield Parish Church and Chapel ...	21	13	[illegible]
St. Peter Highgate-hill ..	23	0	[illegible]
St. John Baptist, Chislehurst ..	22	19	[illegible]
Upper Holloway Baptist Chapel	26	15	[illegible]
Dulwich College, with additions ..	52	0	0
Lewisham High-road Congregational Church ..	20	0	0
Ilford Parish Church and Chapels	33	3	0
Chipping Barnet Parish Church	35	14	[illegible]
Crouch hill Presbyterian Church ..	48	1	0

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Alex. Miller	25	0	0
Miss Emily Old	25	0	0
F F"	50	0	0
Vintners Company	21	0	0
St Mary Boltons	65	0	0
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St. Mary Brookfield Dartmouth-park	20	0	5
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St Stephen Westminster	23	16	10
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Clapton park Baptist Chapel	34	9	7
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St. Paul Upper Holloway	26	0	11
St. Peter Clapham	23	9	11
Brixton Independent Church	53	12	9
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St. George Beckenham	60	12	11
St, Mary, Shortlands	35	11	6
St Mary Magdalene Wandsworth Common	24	7	11
St. John's Presbyterian Church, Kensington	82	0	0
St. Saviour Ealing	20	10	4
All Saints Norfolk square	30	0	0
Dulwich College Chapel	51	10	0
C H T Hawkins	21	0	0
St James Clapton	46	8	7
St Augustine Highbury New Park	56	2	10
St. Augustine, Queen's-gate	87	5	0
East London Christian Evidence Society	81	10	0
Holy Trinity Upper Tooting	42	18	6
Trinity Presbyterian Church Notting hill	46	12	0
Christian Evidence Society's East London Branch	34	11	6
St. George's Presbyterian Church, Brondesbury	27	10	0
Bromley Midcross Parish Church and Mission	23	0	0
Grosvenor Chapel South Audley-street	32	0	11
St. James, Garlickhithe	25	13	4
St. Mary Enfield	27	15	7
Finsbury Park Wesleyan Church	22	2	10
Mitcham Parish Church	48	2	7
St Mary West Kensington	26	1	6
Iwell Park Church and All Saints	28	4	3
Box outside Mansion House	20	14	4
Chislehurst Parish Church	337	11	7
Westminster Abbey	205	13	1
J B S	100	0	0
Major Jones	50	0	0
St Luke, Chelsea, Parish Church	59	3	11
Bromley (Kent) Parish Church	64	1	8
St. Mark's Bromley kent	33	15	5
St. James the Less Westminster	32	14	7
St. Mary the Virgin Hayes	30	15	3
Chiswick Parish Church	35	6	5
St Simon, Upper Chelsea	46	7	6
Highgate Presbyterian Church	37	3	7
Holy Trinity Lee	32	0	0
Orpington Parish Church and St. Paul's	37	11	4
Regent's Park Baptist Chapel	41	7	2
Christ Church Newgate-street	38	17	4
St. Paul Winchmore Hill	20	7	5
Archway road Wesleyan Chapel	25	11	6
St Anne Wandsworth	33	0	0
St. Saviour Paddington	56	8	2
Brixton Wesleyan Circuit	55	19	0
St. Mark, Reigate	73	19	0
Christ Church Hornsey	52	1	4
Church of the Annunciation, Chislehurst	83	4	5
St. Andrew, Leytonstone	63	2	9
Leytonstone Congregational Church	24	5	2
St. Thomas and Mission Stamford hill	21	4	6
St Saviour Denmark park	25	3	5

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING MAY, 1899.

(Specially compiled for THE LANCET.)

Sanitary Areas.	Estimated population in the middle of 1899.	Notified Cases of Infectious Disease. Small-pox.	Scarlet fever	Diphtheria.*	Typhus fever	Enteric fever	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living	Deaths from Principal Infectious Diseases. Small-pox.	Measles.	Scarlet fever	Diphtheria.†	Whooping-cough.	Typhus fever	Enteric fever	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.	Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
LONDON	4,546,752	8	1481	1099	1	137	5	31	429	—	3186	7·3	—	262	30	129	191	—	30	—	56	698	1·6	6873	15·8	110
West Districts.																										
Paddington	128,794	—	18	21	—	1	—	3	12	—	55	4·5	—	1	—	3	6	—	—	—	1	11	0·9	174	14·1	108
Kensington	172,899	—	32	10	1	4	1	3	14	—	65	3·0	—	2	1	1	7	—	1	—	2	14	0·8	231	13·9	116
Hammersmith	103,785	—	33	8	—	2	—	—	6	—	49	4·7	—	8	1	2	4	—	—	—	—	16	1·4	168	16·1	100
Fulham	130,720	1	70	44	—	5	—	—	4	—	124	9·9	—	8	2	4	6	—	—	—	1	21	1·7	192	15·3	137
Chelsea	90,721	—	17	21	—	1	—	—	9	—	48	5·2	—	—	—	4	3	—	—	—	—	7	0·8	166	16·8	79
St. George Hanover-square	80,876	—	7	8	—	4	—	—	7	—	26	3·4	—	1	1	—	—	—	2	—	—	4	0·6	96	12·4	119
Westminster	62,117	—	17	4	—	1	—	—	6	—	28	5·6	—	1	—	—	—	—	1	—	—	2	0·4	102	20·4	101
St. James Westminster	21,827	—	8	—	—	—	—	—	2	—	10	4·8	—	—	—	—	—	—	—	—	—	—	—	30	14·3	83
North Districts.																										
Marylebone	140,139	1	30	16	—	5	—	1	18	—	71	5·3	—	—	—	1	4	—	1	—	2	8	0·6	194	14·4	73
Hampstead	80,252	—	20	11	—	—	—	1	9	—	41	5·3	—	7	1	1	2	—	—	—	—	11	1·4	79	10·3	88
St. Pancras	244,648	—	103	38	—	9	—	—	24	—	174	7·4	—	10	3	14	11	—	1	—	4	43	1·8	398	17·0	119
Islington	348,085	—	133	61	—	13	—	5	21	—	233	7·0	—	25	1	6	17	—	3	—	7	69	1·6	472	14·1	91
Stoke Newington	35,187	—	18	6	—	—	—	2	7	—	33	9·8	—	1	1	1	1	—	—	—	—	4	1·2	37	11·0	89
Hackney	222,671	—	75	60	—	5	—	—	30	—	170	8·0	—	26	3	7	4	—	—	—	3	43	2·0	316	14·8	97
Central Districts.																										
St. Giles	37,196	—	6	5	—	2	—	—	6	—	19	5·3	—	—	—	1	—	—	—	—	—	1	0·3	73	20·5	119
St. Martin in-the-Fields	12,142	—	3	2	—	—	—	—	—	—	5	4·3	—	—	1	1	—	—	—	—	—	1	0·9	22	18·9	364
Strand	23,016	—	14	4	—	—	—	—	—	—	18	8·2	—	—	—	—	2	—	1	—	1	3	1·4	45	20·4	107
Holborn	29,621	—	5	2	—	1	—	—	2	—	10	3·5	—	2	—	3	2	—	3	—	2	7	2·5	76	26·4	264
Clerkenwell	66,068	—	30	21	—	4	—	—	5	—	60	9·5	—	3	—	3	4	—	—	—	2	13	2·1	109	17·2	124
St. Luke	40,868	—	14	10	—	4	—	—	4	—	32	8·2	—	3	1	—	—	—	—	—	—	8	2·0	124	31·6	116
City of London	27,060	—	5	6	—	—	—	—	4	—	15	5·6	—	1	1	1	2	—	—	—	—	5	1·9	61	22·7	170
East Districts.																										
Shoreditch	121,071	—	22	35	—	12	2	—	17	—	88	7·6	—	14	2	2	3	—	—	—	3	24	2·1	220	18·9	124
Bethnal Green	128,938	—	32	24	—	7	—	1	25	—	89	7·2	—	13	—	2	6	—	2	—	9	32	2·6	215	17·4	94
Whitechapel	81,391	—	14	16	—	—	—	1	5	—	35	4·5	—	6	—	1	2	—	—	—	2	11	1·4	131	16·8	112
St. George-in-the-East	48,560	—	5	13	—	5	—	1	3	—	27	5·8	—	9	—	—	2	—	—	—	1	12	2·6	103	22·1	128
Limehouse	58,807	—	9	8	—	—	—	—	8	—	25	4·4	—	23	—	4	5	—	1	—	1	34	6·0	138	24·5	180
Mile End Old Town	113,161	—	20	20	—	1	—	1	11	—	60	5·4	—	2	—	2	9	—	—	—	2	16	1·4	181	16·7	103
Poplar	170,606	—	35	38	—	5	—	1	13	—	92	5·6	—	6	—	8	14	—	3	—	2	33	2·0	284	17·4	123
South Districts.																										
St. Saviour Southwark	24,207	—	18	10	—	—	—	—	2	—	30	12·9	—	—	—	—	2	—	—	—	1	3	1·3	41	17·7	94
St. George Southwark	60,536	—	16	69	—	3	—	1	4	—	79	13·6	—	3	—	3	9	—	—	—	1	16	2·6	127	21·9	180
Newington	124,168	—	57	77	—	—	—	—	13	—	150	12·8	—	3	1	10	11	—	—	—	3	28	2·4	222	18·6	139
St. Olave Southwark	11,038	—	6	2	—	—	—	—	—	—	8	7·5	—	—	—	—	—	—	—	—	—	—	—	17	16·0	30
Bermondsey	85,835	—	30	47	—	5	—	—	5	—	87	10·6	—	2	3	6	6	—	1	—	1	19	2·3	160	19·0	137
Rotherhithe	41,050	—	18	7	—	3	—	—	5	—	33	8·4	—	1	—	—	2	—	1	—	—	4	1·0	68	17·7	126
Lambeth	303,103	1	60	64	—	9	1	—	20	—	165	5·6	—	38	1	10	15	—	3	—	—	67	2·3	469	15·9	104
Battersea	174,996	—	77	69	—	4	—	1	19	—	170	10·1	—	4	1	6	5	—	1	—	—	17	1·0	200	11·9	104
Wandsworth	209,655	—	74	42	—	4	—	2	20	—	142	7·1	—	2	—	4	6	—	1	—	—	12	0·6	245	12·2	86
Camberwell	264,817	—	90	93	—	7	—	3	18	—	211	8·3	—	16	—	9	13	—	—	—	2	40	1·6	347	13·7	112
Greenwich	182,513	—	109	49	—	5	1	3	26	—	193	11·0	—	15	4	5	4	—	3	—	—	31	1·8	242	13·8	88
Lewisham (excluding Penge)	81,027	—	36	32	—	2	—	—	7	—	77	8·8	—	5	—	4	2	—	—	—	—	11	1·3	134	15·4	85
Woolwich	41,642	—	18	11	—	—	—	—	3	—	32	8·0	—	—	1	1	—	—	1	—	2	5	1·3	65	16·3	151
Leo	40,219	—	18	11	—	3	—	—	2	—	34	8·8	—	1	—	—	—	—	—	—	—	1	0·3	39	10·1	49
Plumstead	64,031	—	53	15	—	—	—	1	3	—	72	11·7	—	—	—	1	1	—	—	—	1	3	0·5	75	12·2	77
Port of London	—	—	1	—	—	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 27 cases of membranous croup.

† Including deaths from membranous croup.

experienced from the inability to find accommodation for the patients seeking admission to the hospitals Many of those for whom accommodation was sought were without proper lodging and accommodation in their own homes, indeed, some of these homes had actually been condemned as unfit for human habitation About 12,000 people are at present housed in cellars The requirements of the Liverpool Improvement Act of 1871 and of the Public Health Act of 1875 are very stringent in relation to cellar dwellings and any person who lets or suffers to be occupied any cellar in contravention of these requirements is liable to a penalty not exceeding £10 Proceedings for the abatement of nuisances caused by the excessive emission of smoke from factory chimneys or from steamers were taken under the Liverpool Sanitary Amendment Act, 1854, Sections 24 and 25, and the Liverpool Improvement Act, 1882, Section 77, with the following results in the case of manufactories 527 reports, in the case of steamers in the river 305 reports, and in the case of steamers in dock 71 reports, making a total of 903, as against 943 in 1897 The total fines enacted for these offences amounted to £1182 11*s* 1*d*, as against £1138 15*s* 3*d* in 1897 The large and increasing amount paid in fines for smoke nuisances caused by defective house flues and from low chimneys indicates the necessity for care in preventing them The birth rate in the city of Liverpool was exceptionally high During the last 10 years the mean has been 34 4 per 1000, which is considerably in excess of most of the 35 great towns During the 52 weeks of the year 1898 the returns of the local registrars recorded 22,227 births within the city, making the total birth rate of the city equal to 33 2 per 1000 of the population Of the total births 11,337 were males and 10,890 were females

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

IN 33 of the largest English towns 6627 births and 3591 deaths were registered during the week ending June 10th The annual rate of mortality in these towns which had been 16 0 and 17 7 per 1000 in the two preceding weeks declined again last week to 16 4 In London the rate was 15 7 per 1000, while it averaged 16 9 in the 32 provincial towns The lowest rates in these towns were 10 8 in West Ham, 11 0 in Norwich, 11 4 in Croydon, and 13 2 in Gateshead, the highest rates were 20 8 in Oldham and in Sunderland, 20 9 in Liverpool, 21 0 in Salford, and 22 9 in Manchester The 3591 deaths included 397 which were referred to the principal zymotic diseases, against 358 and 386 in the two preceding weeks, of these 162 resulted from measles, 79 from whooping cough, 62 from diphtheria, 42 from diarrhœa, 27 from "fever" (principally enteric), 23 from scarlet fever, and two from small pox No death from any of these diseases was recorded last week in Norwich, in the other towns they caused the lowest death rates in Croydon, Derby, Halifax, and Gateshead, and the highest rates in Swansea, Bolton, Manchester, and Salford The greatest mortality from measles occurred in London, Nottingham, Bolton, Liverpool, Manchester, and Salford, and from whooping cough in Plymouth, Leicester, Oldham, Huddersfield, and Hull The mortality from scarlet fever and from "fever" showed no noteworthy excess in any of the large towns The 62 deaths from diphtheria included 28 in London, seven in Swansea, [illegible] in Sheffield, six in Leicester, six in Hull, and three in West Ham One fatal case of small pox was registered in [illegible] and one in Hull, but not one in any other of the 33 large towns, and only one small pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday last, June 10th The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2269, against numbers increasing from 2161 to 2212 at the end of the three preceding weeks, 278 new cases were admitted during the week, against 211, 229, and 260 in the three preceding weeks Influenza was certified as the primary cause of 18 deaths in London The deaths referred to diseases of the respiratory organs in London which had been [illegible] and 240 in the two preceding weeks further [illegible] the [illegible] week difficulty [illegible] below the corrected [illegible] which may sug[illegible] With regard to an outbreak of typhus fever in [illegible], another local medical officer, Dr Dewar, "reports that even day there was so little light that he was obliged to [illegible] each Nottingham, Manchester, Leeds, Newcastle-upon Tyne, and in 13 other smaller towns The largest proportions of uncertified deaths were registered in Birmingham, Leicester, Liverpool, and Blackburn

HEALTH OF SCOTCH TOWNS

The annual rate of mortality in the eight Scotch towns which had been 16 9 and 19 9 per 1000 in the two preceding weeks declined again to 18 9 during the week ending June 10th, but was 2 5 per 1000 above the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 14 1 in Leith and 17 6 in Paisley to 21 3 in Dundee and 23 7 in Perth The 576 deaths in these towns included 25 which were referred to measles 16 to whooping cough, 12 to diarrhœa, six to "fever" five to scarlet fever, and two to diphtheria In all, 66 deaths resulted from these principal zymotic diseases, against 52 and 68 in the two preceding weeks These 66 deaths were equal to an annual rate of 2 2 per 1000, which was slightly above the mean rate last week from the same diseases in the 33 large English towns The fatal cases of measles which had been 11 and 16 in the two preceding weeks further rose to 25 last week, of which 24 occurred in Glasgow The 16 deaths from whooping cough corresponded with the number recorded in the preceding week, and included five in Leith, four in Edinburgh, four in Glasgow, and three in Dundee The deaths referred to different forms of "fever" which had been one and three in the two preceding weeks further rose to 6 last week, of which four occurred in Glasgow and two in Dundee The five fatal cases of scarlet fever showed a decline of six from the number registered in the preceding week and included four in Glasgow The deaths referred to diseases of the respiratory organs in these towns, which had been 80 and 108 in the two preceding weeks declined again to 93 last week and were 16 below the number in the corresponding period of last year The causes of 26, or more than 4 per cent, of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death rate in Dublin which had declined in the three preceding weeks from 26 8 to 22 1 per 1000 rose again to 25 2 during the week ending June 10th During the past four weeks the rate of mortality in the city has averaged 25 2 per 1000, the rate during the same period being 16·2 in London and 18 2 in Edinburgh The 169 deaths registered in Dublin during the week under notice showed an increase of 21 upon the number in the preceding week, and included 11 which were referred to the principal zymotic diseases, against seven and five in the two preceding weeks, of these four resulted from "fever," three from whooping cough, two from scarlet fever, one from diphtheria, one from diarrhœa, and not one either from small pox or measles These 11 deaths were equal to an annual rate of 1 6 per 1000, the zymotic death rate during the same period being 2 0 in London and 1 0 in Edinburgh The four deaths referred to different forms of "fever" exceeded the number recorded in any recent week The fatal cases of whooping cough which had been one and two in the two preceding weeks further rose to three last week The mortality from scarlet fever also exceeded that recorded in any recent week The 169 deaths in Dublin last week included 25 of infants under one year of age and 47 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons exceeded the numbers returned in the preceding week Six inquest cases and five deaths from violence were registered, and 67, or more than a third, of the deaths occurred in public institutions The causes of 14, or more than 8 per cent, of the deaths in the city last week were not certified

VITAL STATISTICS OF LONDON DURING MAY, 1899

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality during May in each of the 43 sanitary areas of London With regard to the notified cases of infectious disease in the metropolis, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 7 3 per 1000 of the population, estimated at 4,546,752 persons in the middle of this year In the three preceding

Battalion, Seaforth Highlanders (Ross-shire Buffs, the Duke of Albany's) Surgeon-Captain J Adam to be Surgeon-Major

ENTERIC FEVER AT DAGSHAI

It will be remembered that some time ago there was a severe outbreak of enteric fever at this Indian hill station and it was decided to evacuate it for a time until some improvements in regard to the water supply and local sanitation had been effected. Dagshai was accordingly evacuated and the cantonments have been left empty during the last two seasons Some cases of this fever have recently occurred among some drafts lately arrived at Dagshai from England It is believed that the outbreak is not due, however, to any local causes but to the fact that the troops contracted the disease before their arrival at the station and brought the disease with them An outbreak of the same disease is also reported from Chakrata among the troops newly arrived in the station These appear to have left Meerut in good health and inquiry is accordingly being made into the condition of the camping stages along the route to discover, if possible, any causes which may account for the infection

THE PHILIPPINE WAR

Military operations appear to be going on in the Philippines more actively than ever There has quite recently been some fierce fighting although on a relatively small scale The American forces apparently scored a marked success at Bacoor General Otis is vigorously pushing on the campaign The climate, at this season especially, must be giving rise to a good deal of inefficiency from sickness among the American troops

Surgeon General Sir Joseph Fayrer, Bart., K C S I, retired list, I M S, has been granted an Indian Good Service Pension.

Correspondence.

"Audi alteram partem."

THE CLAIMS OF CREMATION A REPLY TO SIR FRANCIS SEYMOUR HADEN

To the Editors of THE LANCET

SIRS—Sir Francis Seymour Haden, in his paper in THE LANCET,[1] commences with a statement that his communication is not intended to be controversial, but considering that it is throughout an attack on the practice of cremation and a defence of the earth-to-earth system of burial such a statement can hardly be considered accurate The present letter is an attempt to answer the above mentioned paper and to put forward adequately the claims cremation possesses over other means of disposing of our dead

The case for cremation —1 Everyone who has any knowledge of, or interest in, sanitation recognises that the present system of burial in practically imperishable coffins is a bad system The cemeteries of this country are rapidly becoming crowded with coffins containing dead bodies, potential sources of decomposition and putrefaction These bodies are often those dead from infectious diseases and contain the germs of these diseases These germs frequently find their happiest breeding ground in the soils of cemeteries and from this soil they may be and frequently are conveyed by water or other means to infect the living It would hardly be necessary to quote facts in support of this assertion were it not that Sir Francis Haden has stated that the recent Milroy Lectures of Dr Poore affirm the principle that disease is not conveyed in the earth Now, the following extracts, quoted *verbatim* from the first Milroy Lecture,[2] seem to me to prove the direct opposite of this 'Among the ubiquitous organisms which are habitually found in earth is the bacillus of tetanus It is said to be present in almost all rich garden soils Marchesi has found it at a depth of two metres but no lower The statement made by Ledantec and H M Stanley that the natives of the New Hebrides and Central Africa are in the habit of poisoning their arrows by smearing them with mud (obtained in the New Hebrides from a mangrove swamp) gives emphasis to the importance of a tropical temperature and the absence of tillage as factors which make for increase of virulence of the tetanus bacillus and other organisms found in earth" Surely this supports the contention that to bury a body dying from tetanus and containing the germs of tetanus in the earth is to infect the earth and render it a possible source of infection to others Again, quoting from the same source, Ernest Hart said "Within certain areas in India cholera is endemic, especially in the country of the lower Ganges. There the air, the water, and the soil are never cold, the ground is often damp, and when it is dry the tanks are foul, so that there is always a fit breeding-place for the contagion" When we plant a body filled with this contagion in a medium so fitted for its cultivation we run a risk—a very serious risk—of starting and spreading an outbreak of cholera As a matter of fact, in the Board of Trade Reports a number of instances of epidemics of cholera directly traceable to the proximity of graveyards has been published. Dr Friere of Rio de Janeiro has shown, too, that the organism of yellow fever multiplies in the soil of cemeteries in which countless numbers of germs are sown every time a body dead from yellow fever is buried and that it can be reproduced by water in which the soil of such places has been washed These examples might be multiplied over and over again Surely, then, it is not accurate to contend that the earth is not one of the methods by which infectious disease may be conveyed.

2 Recognising that some alteration is absolutely necessary in our present method of disposal of the dead the question to decide is what system is the best The various means which have been either suggested or carried out may be classified as follows (*a*) simple exposure to the air as practised by the Australian aborigines, (*b*) committal to water as burial at sea, or to a river, as by some of the natives of India in their sacred river the Ganges, (*c*) exposure to be eaten by vultures, as by the Parsees in the Towers of Silence at Bombay, (*d*) disposal by desiccation, (*e*) ordinary burial in sealed coffins, (*f*) burial in rapidly perishable coffins, or earth-to-earth burial, and (*g*) cremation The first four of these systems possess such obvious disadvantages that no discussion on them is necessary The objections to the fifth have already been considered, so that there remain only the earth-to-earth system (with which Sir Francis Seymour Haden's name is so intimately associated) and cremation To my mind the fact that to bury a dead body in the earth, no matter whether in a perishable or an imperishable covering, is to pollute and contaminate that earth, to render that earth a potential source of infection of all kinds of diseases to living persons by itself effectually disposes of the claims of this system as the one we should adopt. By cremation these dead bodies, these possible sources of putrefaction and disease, are rapidly and effectually transformed into harmless compounds instead of undergoing the revolting process of decomposition in the earth, and provided that the objections which have been urged against it can be overcome it is surely the ideal method of disposing of dead bodies

3 The objections to cremation may be discussed under the following heads the sentimental, the religious the sanitary, and the medico legal. The sentimental objection is, from a scientific standpoint, unimportant Time and education in matters of sanitation will effectually dispose of that—it is not one which need detain us The religious argument against cremation is very feeble It has been contended that the immortality of the body is jeopardised by its destruction in the furnace The ultimate result of disintegration of the body is identical, whatever the process by which it comes about—namely, a resolution into its elementary constituents; it is simply a question of the length of time taken by the earth or by fire to do it and it is ridiculous to contend that the time taken by the body to be resolved into its components can have any influence on its subsequent immortality Do those who use this argument believe that those martyrs who were burnt at the stake have thereby lessened their chances of resurrection? There is no real sanitary reason against the adoption of cremation as a universal custom Sir Francis Haden says that on a large scale such a consumption and carbonisation of pure air would take place that a large area in the neighbourhood of the furnaces would be rendered uninhabitable. The answer to this is simple with properly constructed furnaces the process of combustion is quite complete, no foul gas is allowed to contaminate the atmosphere The analogy to the dust destructors which exist in our large towns and boroughs—e g, St Pancras and Shoreditch—is

[1] THE LANCET May 27th, 1899.
[2] THE LANCET Feb. 2nd 1899.

months the rates had been 8 5, 6 7, and 6 2 per 1000 respectively The rates were considerably below the average in Paddington, Kensington, St George Hanover square, St Martin in the Fields, Holborn, Whitechapel, and Limehouse, while they showed the largest excess in St Saviour Southwark, St George Southwark, Newington, Bermondsey, Battersea, Greenwich, and Plumstead sanitary areas Three cases of small pox were notified in London during May, including one in Fulham, one in Marylebone, and one in Lambeth sanitary areas, two small pox patients were admitted into the Metropolitan Asylums Hospitals during May, and one remained under treatment at the end of last month The prevalence of scarlet fever in London showed an increase upon that recorded in the preceding month, among the various sanitary areas this disease showed the highest proportional prevalence in Fulham, Stoke Newington, Strand, St Saviour Southwark, Greenwich, and Plumstead The Metropolitan Asylums Hospitals contained 2172 scarlet fever patients at the end of May, against 2535, 2272, and 2088 at the end of the three preceding months, the weekly admissions averaged 229, against 236, 196, and 177 in the three preceding months The prevalence of diphtheria in London showed a marked increase upon that recorded in the preceding month, this disease was proportionally most prevalent in Fulham, St Saviour Southwark, St George Southwark, Newington, Bermondsey, Battersea, Camberwell, and Lewisham sanitary areas There were 1129 diphtheria patients under treatment in the Metropolitan Asylums Hospitals at the end of May, against 1388, 1159, and 994 at the end of the three preceding months, the weekly admissions averaged 152, against 172, 127, and 107 in the three preceding months The prevalence of enteric fever in London showed a further decline from that recorded in recent months, among the various sanitary areas this disease showed the highest proportional prevalence in St Luke, Shoreditch, St George-in the East, Greenwich, and Lee sanitary areas The Metropolitan Asylums Hospitals contained 99 enteric fever patients at the end of May, against 215, 148, and 124 at the end of the three preceding months, the weekly admissions averaged 16, against 19 and 17 in the two preceding months Erysipelas was proportionally most prevalent in Hackney St Giles, London City, Shoreditch, Bethnal Green, and Limehouse sanitary areas The 31 cases of puerperal fever notified in London during May included five in Islington, and three each in Paddington, Kensington, Camberwell, and Greenwich sanitary areas

The mortality statistics in the table relate to the deaths of persons actually belonging to the various sanitary areas of the metropolis, the deaths occurring in the institutions of London having been distributed among the various sanitary areas in which the patients had previously resided During the five weeks ending June 3rd, the deaths of 6873 persons belonging to London were registered, equal to an annual rate of 15 8 per 1000, against 20 3, 22 2, and 18 0 per 1000 in the three preceding months The lowest death rates in the various sanitary areas were 10 1 in Lee, 10 3 in Hampstead, 11 0 in Stoke Newington, 11 9 in Battersea, 12 2 in Wandsworth and in Plumstead, and 12 4 in St George Hanover Square, the highest rates were 20 5 in St Giles, 21 9 in St George Southwark, 22 1 in St George in the East, 22 7 in the City of London, 24 5 in Limehouse, 26 4 in Holborn, and 31 6 in St Luke During the five weeks of May 698 deaths were referred to the principal zymotic diseases in London, of these 262 resulted from measles, 30 from scarlet fever, 129 from diphtheria, 191 from whooping cough, 30 from enteric fever, 56 from diarrhœa, and not one either from small pox, typhus, or any ill defined form of continued fever These 698 deaths were equal to an annual rate of 1 6 per 1000, against 1 6, 1 9, and 1 6 in the three preceding months No death from any of these zymotic diseases was recorded last month in St James Westminster or in St Olave Southwark, in the other sanitary areas they caused the lowest death rates in St George Hanover square, Westminster, Marylebone, St Giles, Wandsworth, Lee, and Plumstead, and the highest rates in Holborn, Bethnal Green, St George-in the-East, Limehouse, St George Southwark, and Newington The 262 fatal cases of measles were 128 below the corrected average number in the corresponding periods of the 10 preceding years, this disease showed the highest proportional fatality in Hampstead, Hackney, Shoreditch, Bethnal Green, St George in the-East, Limehouse, and Lambeth sanitary areas The 30 deaths referred to scarlet fever were less than half the corrected average number, this disease was proportionately most fatal in Bermondsey and Greenwich sanitary areas The 129 fatal cases of diphtheria were 50 below the corrected average number, this disease showed the highest proportional fatality in St Pancras, Clerkenwell, Limehouse, Poplar, Newington, and Bermondsey sanitary areas The 191 deaths from whooping cough were 98 below the corrected average number, this disease was proportionally most fatal in St Luke, Limehouse, Mile End Old Town, Poplar, St George Southwark, and Newington sanitary areas The 30 fatal cases of enteric fever were 10 below the corrected average number, the mortality from this disease showed no marked excess in any of the sanitary areas The 56 deaths from diarrhœa were 12 below the corrected average number In conclusion, it may be stated that the aggregate mortality in London during May from these principal zymotic diseases was more than 34 per cent. below the average

Infant mortality in London during May, measured by the proportion of deaths of children under one year of age to registered births, was equal to 110 per 1000 Among the various sanitary areas the lowest rates of infant mortality were recorded in Chelsea, Marylebone, St Olave Southwark, Lewisham, Lee, and Plumstead, and the highest rates in Westminster, St Martin in the-Fields, Holborn, City of London, Limehouse, and St George Southwark

THE SERVICES.

ROYAL NAVY-MEDICAL SERVICE

INSPECTOR GENERAL OF HOSPITALS AND FLEETS HENRY MACDONNELL, C B, has been placed on the Retired List Staff Surgeon Edward Hanbury Williams has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet

ROYAL ARMY MEDICAL CORPS

The under mentioned officers retire on retired pay Major John W Beatty and Major William G Clements

INDIA AND THE INDIAN MEDICAL SERVICES

The following appointments are announced —The services of Captain A F W King (Bombay), are placed temporarily at the disposal of the Government of Bombay for employment on plague duty The services of the undermentioned officers are placed temporarily at the disposal of the Government of Bengal for employment on plague duty Major H D Rowan, R A M C, Captain C J B Statham, R A M C, Captain R W H Jackson, R A M C, and Lieutenant W E P V Marriott, R.A.M C The services of Major H E Deane, R A.M C, are placed at the disposal of the Government of Bengal for employment on plague duty The services of Captain A R S Anderson (Bengal) are placed temporarily at the disposal of the Government of Bengal The services of Captain W G Pridmore (Madras) are placed temporarily at the disposal of the Government of Burmah The services of Captain T A. Granger (Bengal) are placed temporarily at the disposal of the Chief Commissioner of Assam The services of Captain P F Chapman (Bengal) are placed temporarily at the disposal of the Chief Commissioner of the Central Provinces. The services of Captain W W Clemesha (Bengal) are placed temporarily at the disposal of the Government of Bengal for employment on plague duty The services of the under mentioned officers are placed temporarily at the disposal of the Government of the North Western Provinces and Oudh Captain T W A Fullerton (Bengal) and Captain C B Prall (Bengal)

VOLUNTEER CORPS

Artillery 1st North Riding of Yorkshire (Western Division, Royal Artillery) Septimus Farmer to be Surgeon Lieutenant *Rifle* 3rd (Dumfries) Volunteer Battalion the King's Own Scottish Borderers Surgeon Lieutenant W Murdoch to be Surgeon Captain 2nd Volunteer Battalion the Gloucestershire Regiment Surgeon Captain P T Lunn resigns his commission 1st Volunteer Battalion the Hampshire Regiment Surgeon Captain W K Loveless resigns his commission 2nd Volunteer Battalion the Durham Light Infantry Surgeon Lieutenant T Livingstone resigns his commission 5th (Glasgow Highland) Volunteer Battalion the Highland Light Infantry John McKie to be Surgeon Lieutenant 1st (Ross Highland) Volunteer

as follows "Dr Galeotti, representing Professor Lustig, explained the method of preparing his serum and gave some results obtained at several hospitals *He admitted that the results were not very satisfactory up to the present time*" I shall feel thankful if you would kindly correct the last sentence of your correspondent who doubtless misunderstood my evidence or which was not correctly reported to him. I did not state before the Plague Commission that the results of serum treatment were not satisfactory up to that time, and had I done so it would have been contrary to what I have already published I had occasion to express publicly my opinion on the subject—viz, that the results obtained in plague patients with Professor Lustig's serum were generally very good and encouraging, because the mortality amongst the treated patients was about 53 per cent., as compared with a mortality of from 75 to 79 per cent. amongst non treated patients With the serum of one horse the results were most satisfactory, the mortality being reduced by nearly 40 per cent.

I am, Sirs, yours faithfully,

Bombay April 24th, 1899. DR. GINO GALEOTTI

POISONING BY GELSEMIUM

To the Editors of THE LANCET

SIRS,—The following notes ought to be of interest to the medical profession generally and to toxicologists particularly, because accounts of poisoning by gelsemium are rare

I took two ounces of the tincture of gelsemium instead of a glass of sherry and returning to the dining room awaited the result. It was not long forthcoming (We all live on the ground floor here) The few feet travelled to the dispensary found me only too ready to accept the receipt of a helping arm and in another minute the legs were paralysed, dragging myself to the bedside with my fore-limbs they were unable to help me into the bed, into which I was lifted There was no trouble so long as I lay quiet but on the least exertion there were excessive tremors Vomiting occurred during the next 24 hours. The temperature rose to 101 5 F The heart's action was very violent and intermittent, possibly the aggravation of existing disease.

All the muscles of the eyes must have been affected but of all the voluntary muscles those of the right side suffered most. Prolonged conversation involved paralysis of the upper lip The other symptoms were (1) somnolence, (2) no mental excitement and (3) good appetite The effect of the drug passed away as it began, from below upwards, but after the arms had recovered vision was not perfect for 24 hours If this accident had been due to any carelessness of mine I should not have been so ready to give you an account of the effects of gelsemium sempervirens

I am, Sirs, yours faithfully,

J H NANKIVELL,

Cape Colony District Surgeon.

"CURE OF ASCITES DUE TO LIVER CIRRHOSIS BY OPERATION"

To the Editors of THE LANCET

SIRS,—I have read with much interest the paper on the above subject by Mr Rutherford Morison in THE LANCET of May 27th, especially as I think that I was the first to advocate this method of treatment in these cases, and which I have practised with comparative success since 1888 As some considerable time has elapsed perhaps you will kindly allow me to quote briefly from a paper of mine read at the Surgical Section of the Royal Academy of Medicine in Ireland "When I meet with a case of distended ascitic abdomen I do not, under any circumstances, tap It is my practice to open the abdomen 'prepared for any emergency by an incision sufficient to admit my forefinger which will enable an experienced surgeon to ascertain in a minute the exact condition of affairs inside Should it only happen to be simple ascites (hepatic) the result will be sometimes cure and in any case the fluid will not re-accumulate for a much longer period than if tapped In malignant disease you make a definite diagnosis and it gives a complete abeyance for an indefinite period of the pain and urgent symptoms and in some cases causes a mysterious disappearance of the growth. This may seem to some of you heroic and incredible, but I can assure you from personal experience that it is fact, and that by this method of treatment not only do you know the exact state of things but you are running less risk (if any!) than by plunging a trocar into a distended abdomen. As to this method of cure we are in the dark and have so far only to accept the fact."

The details of treatment I carry out are very simple and are as follows. After opening the abdomen by a small incision just below the umbilicus I break down adhesions which in some cases are considerable in the hepatic region; I wash out the abdominal cavity with hot water at a temperature of 112° F until the fluid returns quite clear, and then close it without a drain I have had some excellent and gratifying results One woman was able to join her husband in Australia in a few months apparently completely cured, in other cases apparent malignant growths and conditions accompanied by ascites disappeared, and in the rest of the cases the fluid did not accumulate rapidly In my experience general dropsy contra indicates operation, as here we have to do with causes outside abdominal

I am, Sirs, yours faithfully,

Harley-street, W June 14th 1899. ROBERT O'CALLAGHAN

"SIR GEORGE PILKINGTON, M.P, AND THE MEDICAL REGISTER"

To the Editors of THE LANCET

SIRS,—With regard to your comments in THE LANCET of June 3rd, on page 1503, on the inaccuracy of the Medical Register I think it only fair to state that my name, &c, is not recorded as it should be because I refused to pay the fee of 5s asked to make the necessary change of name As the completeness and accuracy of the Register are of great importance to the public and the way in which my name appears is of no importance to me I declined to be taxed 5s for their benefit

I am, Sirs, yours faithfully,

Belle Vue Southport, June 5th, 1899. GEO A. PILKINGTON

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT BERLIN

(BY A SPECIAL CORRESPONDENT)

THE recent International Congress on Tuberculosis at Berlin presented many points of interest to the British physician Much valuable information was given concerning the distribution, etiology, and prophylaxis of tuberculosis as were a few useful hints concerning treatment, although in the latter department no very startling announcement was made The immediate object was to encourage the medical profession and the public in Germany by a record of the progress effected during the last few years, of which that country may well be proud, but the influence of the Congress will be felt in many other civilised countries and notably in England, where after many years' neglect we are beginning to realise the importance of systematic hygienic treatment of consumptives under medical supervision, and of other measures which will probably effect as great a diminution in the mortality from tuberculosis in this country as was effected by the sanitary improvements of the last 40 years

Dr Köhler's address brought out afresh a peculiarity in the incidence of tuberculosis in Germany Compared with the numbers living at each age group there is a progressive increase with advancing age in the incidence of pulmonary tuberculosis, so that the heaviest mortality occurs at the ages of from 60 to 70 years Dr Schjerning showed that in the German army the mortality was greatest in those corps which were recruited from densely populated districts, and that whereas workers indoors (regimental bakers, musicians and the like) showed a large proportion of phthisical cases, in the active troops (infantry, cavalry, artillery and pioneers) there was a heavy sickness list but very little tuberculosis Mortality from tuberculosis appears to be falling in all civilised countries, especially that from pulmonary tuberculosis although the improvement is most marked where the most systematic efforts have been made to combat the disease

It is no longer a matter of doubt that the bacillus of Koch

obvious These are furnaces for the destruction of dead organic matter and they are found in practice to do this effectually and completely and they do not render either large or small areas uninhabitable, unsanitary, or unpleasant even when situated in a thickly populated district The medico legal argument is the one which has been most prominently pushed forward by the advocates of the earth to-earth system They contend that homicidal crimes such as secret poisoning and stabbing would be rendered less easy of detection consequent on the early and complete destruction of the body and therefore the impossibility of subsequent exhumation and so an increase in such crime would take place Sir Francis Haden[3] states that this is a part of the subject which no cremationist is willing if he can help it to hear mentioned Now, so far from this being true, all cremationists recognise that this at first sight is a serious objection to their method and they have over and over again called attention to it publicly—for example, the speeches delivered by Dr Cameron and Sir Lyon Playfair in the House of Commons on the Disposal of the Dead (Regulation) Bill on April 30th, 1884[4] As regards poisoning, experiments instituted by M Cadet and repeated by M Dourvault and M Worst have shown that arsenic and all mineral poisons (except mercury) can be detected just as well in the ashes of a burnt body as they can be in an exhumed body The organic poisons are destroyed just as much by interment as they are by fire, only, of course, not so quickly But the remedy for this possible evil would be (and this is needed whatever system we adopt) to appoint State officials, as is done in France and Germany, to inquire into and verify the death certificate In the majority of cases no difficulty would arise and in any suspicious case the proper authorities could be notified and an investigation held The detection of crimes of this character is quite rare unless the criminal is discovered at once, after burial it is exceedingly uncommon for suspicion to arise The average number of exhumations, for instance, in this country is only five per annum, and of these less than one is for suspected poisoning As a matter of fact, crime would be *more* likely to be detected, not *less*, if we could make it statutory that a verification of death should be undertaken by some independent official before a body is destroyed by cremation To my mind the objections to cremation can all easily be disposed of It is from all points of view the ideal system for adoption in the future for disposing of the dead

I am, Sirs, yours faithfully,

L A PARRY, M D Lond, F R C S Eng,
Honorary Anæsthetist to the North West London Hospital.

Bartholomew road, N W, May 30th, 1899

THE GENERAL MEDICAL COUNCIL AND THE PROPOSED CONCILIATION BOARD

To the Editors of THE LANCET

SIRS,—It must be allowed, I think, that the idea of bringing together the representatives of the friendly societies and the members of the medical profession is a good one At the same time it must be apparent that the General Medical Council have not gone sufficiently into detail in their scheme

We are all aware that the friendly societies possess at the present moment a thoroughly workable organisation and that they are prepared at a very short notice to nominate and elect men to represent them on a conciliation board On the other hand, it is evident that the medical profession have no such organisation to deal with such a question The point which appears to me of the greatest importance is How are the representatives of the medical profession to be elected and by whom? I submit that neither the British Medical Association nor the medical defence societies could undertake such a duty What I propose for the consideration of the profession is the formation of an association of medical officers connected with friendly societies Let a conference be called of such officers at an early date and let it appoint a committee to formulate a scheme for the establishment of a permanent association In the meantime perhaps you, Sirs, will permit your columns to be used for the discussion of this very important subject I cannot conclude without expressing the satisfaction which is felt with the decision of the General Medical Council in respect to the connexion of the medical profession with those particular associations which combine medical aid with life insurance.

I am, Sirs, yours faithfully,

Cardiff June 10th, 1899. T GARRETT HORDER.

To the Editors of THE LANCET

SIRS,—The resolution of the General Medical Council, "That this Council regards it as unprofessional to hold the appointment of medical officer to associations which systematically practise canvassing and advertising for the purpose of procuring patients," is a step in the dark, and one which may involve endless troubles and worry to medical officers of clubs all over the country Who is to decide what is systematic canvassing and advertising? All the large friendly societies canvass and advertise, but the Council dare not touch their medical officers, for they have a strong Parliamentary vote behind them It is the medical officers of the small clubs, generally young struggling practitioners, who will be the ones to suffer Some medical neighbour, smarting at some real or supposed interference with his patients, will report the club to the Council, and the medical officer, dreading the expense and worry of defending himself, will have to resign The result will be that the great friendly societies will soon exterminate the smaller clubs and our younger men will have to start as assistants to the present club medical officers and be sweated by them instead of obtaining independent practice From a professional point of view the want of a wage limit and inadequate fees are far more objectionable than canvassing, for after all there are but few patients who will change their medical man at the request of an agent unless he can offer them better terms The resolution of the Council practically makes the medical officer responsible for the action of all the agents of the association, with the fearful penalty of utter professional ruin if they are detected canvassing If it applied to all clubs it would not be so objectionable, but a knowledge of modern politics teaches us that it can and will only be applied to the weaker ones If the friendly societies refuse to accept a wage limit, which is the key to the whole matter I fail to see what good can come out of the board of conciliation

I am, Sirs, yours faithfully,

June, 1899 X.

THE MICROCOCCUS OF BERI-BERI

To the Editors of THE LANCET

SIRS,—I came recently across, in THE LANCET of June 25th, 1898, a communication from Dr W K Hunter in which he speaks of a staphylococcus with rapid motion to be found in the blood of beri beri patients and suggests that it may be the cause of the disease I have long been cognisant of a micrococcus easily grown from blood and spleen on agar or gelatin, the growth being non penetrating, greyish in colour, raised, and having very ragged edges These cocci are most motile and the fresh blood in some cases is frequently crammed with them With few exceptions the blood of all my beri beri patients contained them. Wishing to inoculate some animals with these cocci I was unable to obtain any whose blood was not already rich with them Later I found that many healthy patients had them in quantities and still later that they were present in the blood of myself and other European officers This was now nearly two years ago, since which time I have been quite healthy and, I may mention, have never in my life suffered from any symptom of beri beri or from fever of any description A few of my patients suffering from beri beri have had their blood quite free from the cocci throughout their attack I have long come to the conclusion that the coccus is non pathogenic and is contained in the blood of the majority of people living in this colony Probably it is derived from meat, as so many animals possess it in such abundance —I am, Sirs, yours faithfully,

W GILMORE ELLIS,
Medical Superintendent of the Government Lunatic Asylum Singapore.

Singapore May 8th, 1899.

THE PLAGUE COMMISSION

To the Editors of THE LANCET

SIRS,—My attention was only recently drawn by a friend to a report of the evidence taken by the Indian Plague Commission at Bombay and which is published in THE LANCET of Dec 24th, 1898, p 1740 I find that I have been reported

[3] THE LANCET May 27th, 1899
[4] The Times, May 1st, 1884

as follows "Dr Galeotti, representing Professor Lustig, explained the method of preparing his serum and gave some results obtained at several hospitals *He admitted that the results were not very satisfactory up to the present time*" I shall feel thankful if you would kindly correct the last sentence of your correspondent who doubtless misunderstood my evidence or which was not correctly reported to him I did not state before the Plague Commission that the results of serum treatment were not satisfactory up to that time, and had I done so it would have been contrary to what I have already published I had occasion to express publicly my opinion on the subject—viz, that the results obtained in plague patients with Professor Lustig's serum were generally very good and encouraging, because the mortality amongst the treated patients was about 53 per cent, as compared with a mortality of from 75 to 79 per cent amongst non treated patients With the serum of one horse the results were most satisfactory, the mortality being reduced by nearly 40 per cent

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All the muscles of the eyes must have been affected, but of all the voluntary muscles those of the right side suffered most Prolonged conversation involved paralysis of the upper lip The other symptoms were (1) somnolence, (2) no mental excitement, and (3) good appetite The effect of the drug passed away as it began, from below upwards, but after the arms had recovered vision was not perfect for 24 hours If this accident had been due to any carelessness of mine I should not have been so ready to give you an account of the effects of gelsemium sempervirens

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The details of treatment I carry out are very simple and are as follows After opening the abdomen by a small incision just below the umbilicus I break down adhesions which in some cases are considerable in the hepatic region; I wash out the abdominal cavity with hot water at a temperature of 112° F until the fluid returns quite clear, and then close it without a drain I have had some excellent and gratifying results One woman was able to join her husband in Australia in a few months apparently completely cured, in other cases apparent malignant growths and conditions accompanied by ascites disappeared, and in the rest of the cases the fluid did not accumulate rapidly In my experience general dropsy contra indicates operation, as here we have to do with causes outside abdominal

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I am, Sirs, yours faithfully,

Belle Vue, Southport, June 9th 1899. GEO A PILKINGTON

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT BERLIN

(BY A SPECIAL CORRESPONDENT)

THE recent International Congress on Tuberculosis at Berlin presented many points of interest to the British physician Much valuable information was given concerning the distribution, etiology, and prophylaxis of tuberculosis as were a few useful hints concerning treatment, although in the latter department no very startling announcement was made The immediate object was to encourage the medical profession and the public in Germany by a record of the progress effected during the last few years, of which that country may well be proud, but the influence of the Congress will be felt in many other civilised countries, and notably in England, where after many years' neglect we are beginning to realise the importance of systematic hygienic treatment of consumptives under medical supervision, and of other measures which will probably effect as great a diminution in the mortality from tuberculosis in this country as was effected by the sanitary improvements of the last 40 years

Dr Kohler's address brought out afresh a peculiarity in the incidence of tuberculosis in Germany Compared with the numbers living at each age group there is a progressive increase with advancing age in the incidence of pulmonary tuberculosis, so that the heaviest mortality occurs at the ages of from 60 to 70 years Dr Schjerning showed that in the German army the mortality was greatest in those corps which were recruited from densely populated districts, and that whereas workers indoors (regimental bakers, musicians, and the like) showed a large proportion of phthisical cases, in the active troops (infantry, cavalry, artillery, and pioneers) there was a heavy sickness list but very little tuberculosis Mortality from tuberculosis appears to be falling in all civilised countries, especially that from pulmonary tuberculosis, although the improvement is most marked where the most systematic efforts have been made to combat the disease

It is no longer a matter of doubt that the bacillus of Koch

as the chief cause of tuberculosis, although it is still disputed how far the clinical features of phthisis are due to other associated bacteria In this respect Pfeiffer holds different views from those advanced in this country by Kingston Fowler and others, and believes that the hectic fever of phthisical patients is entirely due to "mixed infection" There was a general consensus of opinion that tuberculous milk was a most important cause of tuberculosis in mankind, and that apart from the systematic inspection of dairies and prohibition of the sale of infected milk much could be effected without legislation if everyone insisted on being supplied with milk from tuberculin tested cows An important communication from Obermüller dealt with the question of tubercle bacilli in butter There has been some controversy as to whether infection can take place through this article of food, as the bacilli found in some specimens were said to be examples of an allied bacillus (Petri's butter bacillus) capable of producing anatomically similar lesions in animals whilst less dangerous to man From the experiments of Obermüller and Frl Rabinowitsch, confirmed recently by Koch, it appears that undoubted living tubercle bacilli may be found in butter, and the former recommends that the butter be made from pasteurised milk as being both safer and more economical It is stated that in some parts of Germany as many as 60 per cent of the cattle are tuberculous, but it is well known that those kept in the open (especially in hilly or mountainous districts) are but little affected According to Schumburg tubercle bacilli are only found in butchers' meat when there is advanced disease with cavities, but it must be remembered that lymph glands, lymph tracts, and bones are frequently affected, and tuberculous material may be smeared over sound portions of the animal. Flügge insisted on the identity of the bacillus of mammals with that of man, while the identity of avian tuberculosis was not established He regards the tubercle bacillus as the sole cause of all the symptoms of tuberculosis in man and considers the bacillus as an obligate parasite in man and animals, excluding purely artificial cultivations Fränkel insisted on the truth of Flügge's views as to the pulverisation of sputa in coughing and sneezing, and pointed out that the chief danger of transmission was in the immediate neighbourhood of the patient, as light and desiccation speedily kill the bacillus, and the disease is further limited by the resistance of the healthy organism to all but large and repeated doses It was recognised that the danger of transmission exists chiefly in overcrowded and dirty rooms and in dusty work shops Rubner advocated the separation of sick from healthy workmen and the dismissal of susceptible subjects from unhealthy trades Leube advocated the use of wadding masks during the bed making and cleansing of rooms in hospitals and the like He regarded segregation of phthisical patients in general hospitals as more needed in the interests of the patients themselves than to prevent spread of infection Out of 312 consecutive cases of phthisis recorded by von Zander infection could be proved in 116 (or 37 3 per cent) In 20 1 per cent this was transmitted from a relative, in 6 7 per cent from husband or wife, and in 10 5 per cent from fellow workmen or the unrelated occupants of the same room

Löffler argued that inheritance of the disease might be disregarded as only a pathological curiosity, while an inherited tendency, although probable, had not been proven. Roth urged the importance of early diagnosis and the value of sanatoria from an educational point of view, the need of systematic instruction of the members of sick clubs and in workshops and the like, the need of special arrangements in schools and prisons which have phthisical or susceptible inmates, the care of convalescents, and prompt isolation of phthisical subjects who expectorate bacilli He also advocated that affected persons should be forbidden to act as wet nurses or sick nurses or in the preparation of food He was in favour of notification of cases of tuberculosis in private nursing homes, asylums, almshouses, and the like, and in private houses where a change of abode occurred, so that disinfection and other protective measures could be enforced No doubt this would be easier in Berlin (where everybody has to notify his arrival to the police) than in England although even in this country voluntary notification (e g, at Brighton) has worked well Roth further advocated the separate disinfection of clothing used by phthisical subjects and thorough disinfection of bedding and rooms after death Kirchner discussed the question of marriage of phthisical subjects, and although satisfied that compulsory prevention of such marriages was impossible, yet urged that full information should be given by the medical man wherever they were contemplated, and special precautions taken both for the sake of the patients and of their offspring and those living with them Everyone is nowadays agreed as to the importance of properly dealing with the sputa of phthisical patients Ritter von Weismayr recommended that the sputa should be thrown into the water-closet or mixed with peat and burnt, or with lime and buried, and that random spitting should be forbidden An interesting paper was read by Malvoz on the Bacteriological Institutes in Belgium which gratuitously examine sputa and disinfect rooms, half the cost being borne by the State In order to teach phthisical members of the working class how to conduct themselves it has been found necessary to erect a popular sanatorium in connexion with one of these institutes

The enormous extension of the sanatorium treatment in Germany under the influence of the Insurance Law makes it quite impossible to deal with the subject there The existence of immune zones is no longer a tenable hypothesis, and healthy places of many kinds are now regarded as sufficient for the cure of patients by systematic measures As regards treatment, apart from a masterly paper on Climate by Sir Hermann Weber and a description of the methods used and the good results obtained at Ventnor by Sinclair Coghill, the chief interest for British members centred in the papers of Kobert, Landerer, Brieger, Denys, and Campana Iodoform was regarded by Kobert as the best remedy for surgical tuberculosis, and orthoform and lactic acid for laryngeal complications Miliary and galloping tuberculosis were considered to be incurable, while cases of ordinary phthisis could be readily arrested by the hygienic and dietetic methods associated with Brehmer's name, aided by ordinary symptomatic treatment Kobert and Landerer both praised the use of cinnamic acid to provoke leucocytosis Brieger still regards tuberculin as useful in early stages and is supported by Campana of Rome, and by Denys of Louvain who uses a special preparation The use of anti tuberculous serum as prepared in America was advocated by von Schweinitz who also quoted Stubbert in support

To sum up, the general impression left by the Congress was that while no specific has yet been discovered we have in the shape of systematic treatment by hygienic measures, especially in suitable sanatoria and health resorts most potent and sufficient means of treatment in all early uncomplicated cases of phthisis, while still more is possible in the way of prevention

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

The Transport of Plague Microbes Stringent Regulations — The Misfortunes of Karachi —Plague and Cholera — Minor News.

IT will be remembered that in June of last year two cases of plague occurred on board the steamer *Carthage* on her voyage to Europe It so happened that a medical man who was a passenger made during the voyage some experiments with what were supposed to be plague microbes No dead rats were found on the homeward voyage but at least two were found on board the vessel on her return voyage to Bombay The result of these coincidences appears to be that the Government of India have thought it necessary to make the following regulations "1 No person without the written or printed permission in this behalf of the local government in whose territories the port is situated under the signature of a Secretary to Government first obtained, shall take either on his own person or in any baggage or parcel or as cargo or otherwise howsoever, or shall send or permit to be taken or sent on his account either on the person of another or in any baggage or parcel or as cargo or otherwise howsoever any plague microbes or cultures on board any vessel in any port in British India 2 No person, whether he has or has not obtained permission as herein before required, shall take, send, or permit to be taken or sent as aforesaid any such microbes or cultures on any such vessel at any such port unless and until he has (1) given

14 clear days' notice in writing of his intention so to do to the [illegible] officer [illegible], and (2) by a certificate signed by such person and in such other manner as may be required by such officer satisfy such officer that all such [illegible] or cultures (1) are [illegible] and intended for scientific purposes in some recognised constituted laboratory or [illegible] specified by such person in his own handwriting and (3) are secured in a [illegible] (i.) of adequate strength, (ii.) [illegible] sealed, and (iii.) labeled with such distinguishing [illegible] as will suffice to make immediately manifest the nature of the contents thereof."

While [illegible] was just getting over its [illegible] severe visitation of plague it was attacked with cholera. This is now said to be spreading alarmingly. On May 22nd 1[illegible] cases and 162 deaths occurred. There were only two deaths from plague, but the total mortality from all causes was [illegible]. For a city of the size of [illegible] this is enormous. Cholera at present is confined to two quarters. The epidemic of plague has almost made bankrupt the municipality, but money is "sanctioned for stamping out the disease." The Bombay Government has sanctioned Rs.[illegible] for the relief of the distressed and starving [illegible] who are principally the victims of cholera. In addition to these troubles foot and mouth disease has appeared in the municipal stables. It is said that several [illegible] suffering from the disease have communicated the disease to the municipal bullocks by infecting the water troughs in the [illegible] Lines, where all kinds of animals [illegible] thirst. The water trough continues to be used and fresh cases are occurring every day. Segregation of the [illegible] animals has been adopted.

The extraordinary precautions [illegible] with the idea of securing Simla from an importation of plague appear almost fanciful in their [illegible]. Persons employed in any Government office in Simla are to be prevented from visiting the Bombay Presidency, certain parts of [illegible], [illegible] and neighbouring districts in Bengal, and the States of Mysore and Hyderabad. Those who are compelled to go to any of these places on urgent business must be provided with a pass and on their return the inspecting medical officer will have to give a certificate that they have undergone the necessary inspection and disinfection.

The [illegible] of the agitators against experiments [illegible] has apparently been heard. After an encouraging and enthusiastic commencement the Indian [illegible] [illegible] Health Institute has suddenly collapsed. Official intimation has been given that the scheme will not be proceeded with. No details are supplied, but evidently the [illegible] cannot appreciate how much suffering is capable of being mitigated by a clearer knowledge of disease.

The plague summary for the week ending May [illegible] shows a marked general improvement. In all India there were only 953 deaths from plague—a less number than in any week since July 1[illegible]. In the Bombay Presidency there were [illegible] deaths, of which Bombay city records 2[illegible]. This shows a marked decline from the 2[illegible] recorded for Bombay city in the previous week. At [illegible] the deaths from plague fell from 171 to [illegible] and in Calcutta from [illegible] to 2[illegible]. The general health of Calcutta as measured by the [illegible] general mortality would appear to be [illegible] good.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Manchester Corporation Fined.

On May 30th the Manchester Corporation was summoned before the County Police Court for polluting the [illegible] Canal and was fined [illegible]. The [illegible] papers, [illegible] in [illegible] and [illegible] agree in [illegible] that the Corporation [illegible] sorry figure" and that if a "[illegible]" commercial [illegible] would [illegible] [illegible] the [illegible] Committee [illegible] proceedings. It is [illegible] still polluting the [illegible] and [illegible] a [illegible] to [illegible] is [illegible] the same as [illegible]. The [illegible] Committee [illegible] been experimenting and investigating, [illegible] scheme has been brought forward after another; the council in its bewilderment has been vacillating, not knowing which way to go, and all the time the filthy sewage has been pouring into the canal. But, after all, the Corporation should not be judged too harshly. It has been beset with difficulties on all sides and in a period when everything relating to the treatment of sewage was in a state of transition, and the Local Government Board, which might have [illegible] matters by [illegible], has been [illegible] to the difficulties. If it would without more hesitation sanction the [illegible] scheme it would most likely be carried out without further loss of time. The Lord Mayor stated that as soon as the Local Government Board report on this [illegible] was received he would call a special meeting, and he thought that the present scheme would be agreed to by a majority of the council.

The [illegible] of Phthisis.

The medical officer of health of Manchester submitted a report to the Sanitary Committee at the last meeting with reference to the notification of phthisis within the city. As might be expected, the recommendations of the report were [illegible]. The estimated cost was £[illegible] and the appointment of a medical man at £[illegible] a year to visit cases [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] of the home was recommended. [illegible] would [illegible] [illegible]. Clearly the [illegible] appointed would require [illegible] tact and delicacy of feeling [illegible] would be cheap at £[illegible] a year. The Sanitary Committee adopted the report and it was [illegible] at the council meeting [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] of [illegible] [illegible] [illegible] in [illegible] [illegible] a [illegible] English [illegible] [illegible]. [illegible] "regulations for the notification of cases of phthisis [illegible] by the Sanitary Committee be [illegible] [illegible]" and this amendment was carried. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] for the treatment of phthisis [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] they will not [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

Manufacture of [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] the Local Government Board for sanction [illegible] [illegible] for the building of the necessary works. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the Gas Committee [illegible] [illegible] [illegible] [illegible] [illegible] the council [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] Objection.

[illegible] [illegible].

The [illegible] [illegible].

The [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

to be paid by the corporation for the purchase of the whole of the infirmary site is said to be £400,000

June 13th.

SCOTLAND

(FROM OUR OWN CORRESPONDENTS)

Consumption Hospital for Dundee

SEVERAL considerable sums of money have already been promised as contributions towards the erection of a hospital for consumption in Dundee. The committee appointed to raise funds for the building met on June 2nd At that meeting it was decided that the hospital should be available for all classes of patients either with or without payment, the matter being under the control of the directors It is desired that subscriptions should take the form of capital sums as endowments or of annual subscriptions. Subscribers of £1000 and upwards shall during their lifetime have absolute presentation to one bed. Steps are being taken to secure a site for the hospital The high ground in the Carse of Gowrie has been suggested as a suitable situation

Cottage Hospital for Blairgowrie and Rattray

It is expected that in about a month the building of the cottage hospital for Blairgowrie and Rattray will be commenced A site of about an acre in extent has been given by Mrs Macpherson of Blairgowrie and £3000 have already been subscribed towards the building fund, £1000 having been given by Lieutenant-General Sir James Clerk-Rattray of Craighall and £500 each by Mrs Nicoll of Blairgowrie and Sir William Laird of Glasgow The estimated cost of the building is £1000, but at least £5000 are needed for furnishing and partial endowment of the institution The district for which the hospital is intended extends from Glenshee and Strathardle in the north to Coupar Angus in the south, and from Alyth in the east to Cluerie in the west

Infectious Hospital for Lockerbie District

Negotiations are proceeding between the burghs of Moffat, Lockerbie, and Lochmaben with reference to the creation of a joint hospital for infectious diseases

Gift to Paisley Infirmary

Mr Peter Coats, Paisley, who has already been a large contributor to the erection of the Paisley Infirmary and who has built a handsome home for the nurses of the institution, has just offered to build an additional block to the infirmary for the treatment of infectious diseases The new block will be 24 feet by 14 feet, and will contain a male and a female ward, each to accommodate three patients, and there will be a lavatory, bath, and nurses' accommodation

Death of Mr Robert Moir, M D, F R C S. Edin, St. Andrews

Dr Robert Moir, who had been ill for about a fortnight, died at St Andrews on June 7th Dr Moir was the second son of "Delta," the late Dr Moir of Musselburgh He was in his sixty ninth year and took a prominent part last year in his father's centenary celebrations Dr Moir had practised in St Andrews for the last 25 years and previously was a surgeon major in the Indian army He has left a widow, three sons, and three daughters to mourn their loss

The Cemetery Scandal in Aberdeen

During the past week investigations were carried on in Nellfield Cemetery under a warrant from the sheriff, obtained on the motion of the Crown officials The operations extended over four days, Professor Hay, M D Edin, being present as medical expert The general public and pressmen were excluded while the Crown examination was being conducted, but the reporters for the evening papers stationed themselves in high windows or back gardens adjoining the burying ground and published alarmist reports of gruesome discoveries having been made The reading of these reports has produced much mental disquietude among lairholders, one at least of whom has died from the excitement so caused, while huge crowds were also drawn by morbid curiosity to the cemetery when it was reopened to the public in the evenings There have also been manifestations of popular indignation against the factor of the Baker Incorporation, although it is pointed out that none of the irregularities complained of have taken place during his term of office Private lairholders have likewise been making examinations of the portions of ground belonging to them On June 10th William Coutts, the late superintendent, was again brought before the sheriff, when nine fresh criminal charges of desecration of graves and mutilation of bodies were preferred against him. His application to be admitted to bail was refused in view of the serious nature of the charges and he will be tried before the High Court of Justiciary in Edinburgh It is expected that Dr Hay, in his capacity of medical officer of health of the city, will make a report to the local authority under the Public Health Acts as to the system of overcrowding which has prevailed in the cemetery, while two members of the town council have given notices of motion to the effect that the municipality shall provide a new and properly regulated burying ground to be managed by the municipal corporation

Conference in Aberdeen on Tuberculosis

Representatives from the Aberdeen Town Council, the Royal Infirmary, the Dispensary, the Royal Hospital for Sick Children, the Parish Council, the Morningfield Hospital, and the local branch of the British Medical Association met in conference last week It was agreed that a sanatorium ought to be provided Doubts were expressed as to the power of the town council to erect and maintain such an institution at the cost of the local assessments, but it was agreed that if tuberculous diseases are not at present embraced in the list of notifiable infectious diseases, steps should be at once adopted in order to secure their inclusion.

June 14th.

IRELAND

(FROM OUR OWN CORRESPONDENTS)

Royal College of Surgeons in Ireland

AT the recent election at the Royal College of Surgeons in Ireland for the President, Vice President, and Council, Mr Robert L Swan and Mr Thomas Myles were re-elected as President and Vice-President respectively The only changes in the *personnel* of the Council were the replacement of Mr Henry Croly, Mr Arthur Benson, and Mr Arthur Chance, by Professor John B Story, Professor William Stoker, and Mr Richard McCausland There will be a vacancy for the position of Vice-President in next June, when Mr Myles will enter on his two years of office as President The candidates who have already announced their intention to contest this vacancy are Mr Francis Heuston, surgeon to the Adelaide Hospital, and Mr Lambert Ormsby, surgeon to the Meath Hospital A letter from the latter gentleman on this subject appeared in THE LANCET of June 10th

Action for Damages against a Medical Officer of Health

Dr Joseph Smyth of Naas has recently obtained a legal decision in his favour which is of importance to all medical officers of health In that capacity he made a report some months ago advising that a certain dairy establishment in the neighbourhood of Naas should be closed, two cases of typhoid fever having occurred in the house of the owner of the dairy and five persons who obtained milk from that establishment having also suffered from the same disease The proprietor of the dairy brought an action against Dr. Smyth for £1000 damages for injury to his business The case came quite recently before his Honour Judge Kane who dismissed the action on the ground that to recover damages in such a suit malice on the part of the medical officer of health should be proved As far as the published reports of the case go there was not even an assertion of malicious action on the part of Dr Smyth

Presentation to Dr Dysart, J P, of Portglenone

Dr Dysart, J P, Portglenone, co Antrim, has been presented with a silver tea and coffee service and silver bowl together with an illuminated address on the occasion of his resignation of the position of medical officer of the Portglenone dispensary district after a long and honourable service of 51 years A purse of sovereigns was also presented to Mrs Dysart Dr Dysart has been for a long period one of the most respected and valued medical men in the county of Antrim

Report on the Belfast Workhouse

Mr Agnew, the Local Government Board inspector, has made his half yearly report on the state of the Belfast Workhouse He refers to the serious overcrowding and want of proper sanitary accommodation in certain departments of the establishment, to the objectionable state of some of the closets in the infirmary, to the non observance of

cleanliness in the lock and skin wards, to the inadequate supply of water to the healthy nursery and infirmary and the consequent inefficient flushing of the closets, to the defective ventilation of certain wards in the female infirmary, and to the objectionable mode of distributing the food of the inmates The report is to be considered by the guardians

Water supply of Portadown

At a meeting of the Portadown District Council on June 5th it was unanimously resolved "That we are of opinion that the town should have a water supply" A difference of opinion took place as to whether the water should be taken from the River Bann or from Lough Neagh Finally it was decided to take the water supply from the River Bann

Health of Belfast

In the report presented by the health officer of Belfast at the meeting of the City Corporation on June 7th it is stated that the present death rate is 24 2 The number of cases of zymotic diseases notified during the previous four weeks embraced in the report was greater than in the preceding month. Typhoid fever is increasing, as are the deaths therefrom, perhaps on account of the warm weather following the previous heavy rains The number of cases of scarlet fever is also larger, though the mortality is very slight.

Royal University Graduates' Association

A Northern Graduates Association composed of those who have taken their degrees in the Royal University has been recently established and the members held their inaugural meeting in Belfast on Jan 10th when Dr W A. M'Keown was elected President and Dr R. W Leslie with three other arts graduates were appointed secretaries As a condition of membership adherence to the following rule is essential—"The Royal University Graduates' Association is an association of those graduates who are opposed to the establishment of provincial or sectarian universities as being detrimental to the best interests of higher education in Ireland and as involving the depreciation of Irish academic degrees and distinctions" Resolutions were adopted at the meeting against the establishment of state-endowed universities under sectarian control, calling upon the graduates of the Royal University to cordially unite in supporting their university, and so to strengthen the hands of the senate in carrying out needed reforms, and declaring that reform is urgently required in several respects and more especially (*a*) in the mode of appointment to fellowships and examinerships and (*b*) in relation to the appointment of extern examiners

June 15th.

PARIS

(FROM OUR OWN CORRESPONDENT)

The Treatment of Hydatid Cysts of the Liver

AT the meeting of the Academy of Medicine held on May 30th Professor Dieulafoy related two cases of cure of hydatid cyst of the liver The first case, in which suppuration had occurred, was treated by abdominal section and incision of the sac, the second, in which the fluid was in a normal condition, was simply aspirated Professor Dieulafoy had brought forward these two cases in order to compare the two methods of treatment and to study the indications for preferring the one to the other According to Professor Dieulafoy those cases of death which occur within a few minutes of the puncture of the sac are due to the escape into the peritoneal cavity of hydatid fluid which is extremely toxic The most minute precautions should be observed to prevent such a thing happening, and the chief point is to empty the sac as completely as possible and not simply to partially evacuate it as has been the case nearly every time that death has followed A very fine needle should be used and never touched after insertion If by some misfortune this should become blocked it is better to leave it alone and insert another The two needles must be removed together as soon as the fluid ceases to flow No pressure must be made on the abdomen with the idea of helping the escape of the fluid, for such pressure is very likely to make the needle come out of the liver and so escape of fluid into the peritoneum is not unlikely to happen Aseptic puncture aided by aspiration and with observation of the above-mentioned precautions is applicable, according to Professor Dieulafoy, to about half the cases seen, especially to those cases where the cyst is not very old or very large and where there is an absence of symptoms indicating infection, such as pain and rigors Abdominal section with incision and removal of the sac should be reserved for cases in which the cyst is very large and has existed a long time, in which adhesions are present, and in which infection of the sac has taken place

The Therapeutic Value of Cacodylate of Sodium

At the meeting of the Academy of Medicine held on May 30th Professor Renaut of Lyons made a communication with regard to the methods of administering arsenic by increasing doses which give the best results To avoid the gastric intolerance which is so serious a hindrance to obtaining the best effect of arsenic administered in the ordinary way he prescribes Fowler's solution administered as a rectal injection, giving three syringefuls per diem of a solution made by mixing four grammes of Fowler's solution with 56 grammes of distilled water, and in this way the patient absorbs from one-third of a centigramme to one centigramme of arsenious acid per diem. Professor Renaut has also, at the suggestion of Professor Gautier, made use of the cacodylate of sodium, a salt which contains nearly 50 per cent of arsenic and which has the great advantage of being non toxic, for even one gramme injected into the veins of a rabbit does not cause death Professor Renaut employs a solution containing 1 10 gramme of the salt to 1000 grammes of water and injects two syringefuls of this solution into the rectum per diem for two days, and then three syringefuls per diem for six days, after which the patient is allowed a rest for five days Cacodylate of sodium acts as a gentle nervine tonic and prevents waste It has no bactericidal powers, but delays tissue change and places the tissues in a better position to resist infection It is useful in the treatment of the early stage of localised and still curable tuberculosis, also in diabetes, Basedow's disease, and the like. In a case of splenic leukæmia treated by cacodylate of sodium the proportion of the red corpuscles which had fallen to 600,000 was raised in less than 20 days to 3,038,000 and to the normal figure of 4,030 000 in less than three months At the next meeting of the Academy, held on June 6th, Professor Gautier continued the discussion of the subject introduced by Professor Renaut In a very important communication he described cacodylic acid as a most valuable remedy which would yield quite extraordinary results in the treatment of such a condition as tuberculosis Although Professor Renaut had been the first to publish his observations Professor Potain, M Burlureaux, and M Roustan some months ago simultaneously commenced experimental trials and all of them had expressed the most confident hope of possessing in cacodylic acid an energetic substance capable of rendering the tissues of the human body resistant to tuberculous infection It has in fact been ascertained that the local signs of tuberculosis gradually improve, that the cough and perspiration diminish, that the patient gains weight rapidly, and that the red blood corpuscles increase in number It is interesting to note that in one respect Professor Gautier differs in opinion from Professor Renaut, the latter of whom sees in the new remedy a means of obtaining the ordinary effects of arsenic and also of administering it in unusually large doses, the toxic power of the arsenic being reduced by its association with an organic body In the opinion of Professor Gautier this is not all The arsenic which exists in large quantity in cacodylic acid is in a special condition no longer giving the characteristic reactions of arsenic This explains why cacodylic acid is not poisonous and does not even produce the troublesome symptoms due to arsenic, such as diarrhœa, staining of the skin paralysis, and hepatic lesions The explanation which Professor Gautier suggests for this unexpected diversity of action is that the new arsenical compound replaces phosphorus in the lecithins and nucleins It is therefore living matter impregnated with arsenic that the leucocytes disperse throughout the circulation and bring into contact with the nervous centres where it seems to become fixed Cacodylic acid being non poisonous differs entirely in its physiological effects from the older arsenical compounds which when introduced into the blood act as well known poisons Brought into direct contact with the nervous tissue, as has been done by M Beredska, arsenic is extremely poisonous, exactly 100 times more so than when taken into the stomach or administered hypodermically For tuberculous patients it is better to give the cacodylate of sodium hypodermically than by the mouth. The dose

of 10 centigrammes (one and a half grains) a day ought not to be exceeded, on an average from two to five centigrammes should be given in 24 hours The injections should be continued for seven or eight days, then stopped and resumed as before after a week's interval When Professor Gautier had brought his communication to a close remarks were made by several members of the Academy, including M G Hayem and M A Robin, who said that it was quite unreasonable to presume a similarity between treatment with cacodylic acid and treatment with arsenic, as Professor Renaut had done, the former being essentially a stimulant whilst arsenic inhibited tissue change.

Compensation for the Slaughter of Tuberculous Animals

In France animals found to be tuberculous are slaughtered under the official regulations and the carcasses are seized, an occurrence which has become much more common since tuberculin has been employed for the early diagnosis of tubercle in animals The law of April 13th, 1898, has provided for the payment of compensation to the owners of animals sacrificed in this way in the interests of public health The compensation is on the following scale (1) when the tuberculosis is very extensive one-third of the animal's value at the time of slaughter, (2) when the disease is localised three fourths of this value; and (3) when the carcass of an animal slaughtered by official order is found to be free from tubercle the full value of the animal as above In all cases the price of the meat and offal sold by the owner, with the permission of the *maire*, is deducted from the compensation above mentioned Compensation must not exceed 200 francs (£8) for one-third of the animal's value and 450 francs (£18) for three-fourths of its value

June 14th.

BERLIN

(FROM OUR OWN CORRESPONDENT)

Self inflicted Injuries Diagnosed by the Roentgen Rays

A FRESH proof of the practical utility of the Roentgen rays has been supplied by a case published by Oberstabsarzt Dr Baehren of Wiesbaden A soldier who alleged that he had been bitten by a horse was admitted into the military hospital with a swelling of the third finger, especially marked at the tip and extending to the back of the hand A sinus developed after several weeks in the neighbourhood of the joint between the first phalanx and the metacarpal bone and the introduction of a probe showed the bone to be denuded of periosteum The sinus healed up after being laid open and cauterised, but the swelling continued and the mobility of the finger was impaired An examination of the hand by the Roentgen rays resulted in the discovery of five needles in the second and third interosseous spaces of the metacarpus There was also a small, scarcely visible, sinus in the fold between the second and third fingers On the following day the skiagraphic examination showed only four needles the man having extracted one of them through the sinus All the needles were removed by a large incision and the hand became quite normal The man at first pretended that he did not know how the needles had come into his hand, but he afterwards admitted that he had introduced them because the hand was painful and he expected relief from the escape of blood He had evidently inflicted these injuries on himself in order to obtain his discharge from military service, not foreseeing that by the aid of the x rays his imposture would be detected

General Practitioners in Surgical Cases

The professional competence of general practitioners has been gravely called in question by a judgment pronounced in a law court of Charlottenburg, a suburb of Berlin A general practitioner being asked to see a child who had fractured his femur called in a surgical specialist who applied a bandage and made no further attendance but left the after treatment to the general practitioner Evidently the bandage was too tight, a fact which escaped the notice of the general practitioner, gangrene set in, amputation became necessary, and the general practitioner was thereupon prosecuted The court, after having heard the opinion of several medical experts, adjudged him not guilty for the following curious reasons (1) that the disastrous issue of the case was not attributable to the general practitioner but to the specialist who had been consulted and who had left the control of the bandage to a general practitioner, and (2) that the court was of opinion that a general practitioner without special surgical training ought not to be allowed to have charge of severe surgical cases The *Deutsche Medicinische Wochenschrift* in discussing the circumstances rightly points out that this decision impugned the reputation of the medical profession in general, and was moreover at variance with medical ethics, for it would have been an infringement of medical etiquette if the surgeon had continued his visits without having been asked to do so by the medical attendant of the family The article goes on to remark that this decision tended to induce the public to abstain from consulting general practitioners when surgical questions were involved and that the medical societies ought to protest against the suggestion of the law courts that none but surgical specialists were competent to attend surgical cases

The Sick Clubs

According to a publication issued by the Imperial Statistical Office there were 22,477 sick clubs under the workmen's insurance laws in 1897, against 22,011 in 1896 and 21,588 in 1892 The number of members was 3,337,319, the number of patients was 2,964,937 The income of the clubs was *16,781,000 marks (£839,000)*, the expenses were 13,394,000 marks (£669,700), of which 12,049,000 marks (£602,450) were paid for treatment in hospitals or by medical officers, for medicines and bandages, and for the maintenance of the patients and their families, the rest being general expenses for club offices, treasurers, clerks, &c These large numbers show how great must be the influence of the clubs on the condition of the medical profession and on medical matters in general The clubs were invited to send delegates to the Congress on Tuberculosis and a great number of them actually attended. A congress of sick clubs was, moreover, held simultaneously with the Congress on Tuberculosis and objections were made to the resolutions of the Practitioners' Associations[1] concerning the compulsory "free-choice system"

June 13th.

ROME

(FROM OUR OWN CORRESPONDENT)

Hydrophobia

ISTITUTI ANTIRABBICI are now established and in working order at nearly all the great centres — Naples, Rome, Milan, Turin, and, finally, Florence — having each its effective institution for the treatment of rabies canina communicated by dog bite to the human subject Their annual reports are generally as satisfactory as they are interesting, and Milan especially has a sustained record of cures hardly inferior to that of the Pasteur Institute itself. But there are many innovations to be brought into the relieving service of the provinces before these institutions can give the poorer class of victims the full benefit of their treatment Let me illustrate the situation by a concrete instance In a country village, several hours distant by rail from the Istituto Antirabbico, a dog of unknown origin or antecedents bites about a dozen persons, the animal is caught but not killed as "mad," till after 40 days, and meanwhile the bitten subjects, with no time to lose, must be made to undergo the appropriate treatment But how are they to be conveyed to the Istituto and once there how are they to be maintained? In law the commune in which the village lies is not bound to undertake their transport or maintenance, this is a fact, tested and decided by appeal to the Consiglio di Stato and the Court of Cassation Recourse is therefore had to the local Congregazione di Carità, but these benevolent societies are oftener than not too heavily drawn upon by other necessitous cases to have the required subsidy at their disposal Failing this, there is an appeal to private charity—again rarely responded to, "non possumus" or "my poverty but not my will consents" being the justification of refusal In despair the wretched "morsicati" (bitten subjects), knowing they have not an hour to lose and haunted by a terror that reduces their chance of cure, apply to the local "gombeen man" or usurer, but his rate of interest is too high and the money cannot be raised though it amount to no more than 60 francs (£2 8s 4d) per

[1] THE LANCET, May 20th, p. 1398.

head So for such cases the Istituto is practically non existent, or if by dint of canvassing or an appeal to the general public the money is at last forthcoming the time lost deprives the poor victims of whatever chance the Istituto could vouchsafe them So the dread malady runs its course, the victims die in excruciating agony, if, indeed, they do not fatally inoculate the loving hands that tend them through the closing scenes Till a proper Assistance Publique is established the Istituti, I repeat, are virtually closed to all but the citizens in their immediate neighbourhood or to such provincials as can afford to come to them Two months ago in the Canavese district (Alta Italia) one dog bit 12 people and numerous other dogs belonging to eight communes in the neighbourhood Hygienic precaution counselled the destruction of those dogs, but their owners would consent to no such step and the animals were kept "in osservazione" for the regulation period of 40 days during which they bit several incautious persons At San Martino (still in the Canavese district) an individual whose dog was bitten by the mad dog above referred to kept his own animal 52 days "in osservazione," till seeing it in apparent good health he unchained it with the result that a few days thereafter it bit his own son whom (fortunately for him) he was rich enough to send to the Istituto Antirabbico at Turin A brilliant exception to the sombre rule which I have just been indicating reaches me from Cigliano in the province of Asti A dog, unknown to the inhabitants, bit 14 of them and several other dogs and was thereafter caught and killed The Syndic of Cigliano, nobly anxious for the health or lives of his fellow citizens, had the victims all sent to the Istituto at Turin while the Commune of Cigliano undertook what must have been the grave burden of boarding and lodging the said victims during all the time of their treatment, the cost amounting to over 750 fr (£30) Why cannot similar provision be made in like circumstances in all communes throughout the kingdom? But Cigliano is exceptionally well to-do I am told Then what is the Government about? The Government, between its Abyssinian and its Chinese annexations and the military and naval expenses which it has to meet, is so desperate for money that, as mentioned in these columns on the authority of the Prime Minister, General Pelloux,[1] it can afford for the 8263 communes in the Italian Kingdom no more than 8000 fr (£320) for all hygienic purposes whatever—that is, about sixpence for each commune! I have not heard of any legislation being introduced to meet this scandal, except, indeed, a Bill to enable communes to borrow on advantageous conditions But as these communes are generally deep in debt and can produce no security worth considering, the Bill, even if carried, will do little or nothing for the health or the lives of the lieges How long is this to last? Or when will "that blessed word" "pazienza" cease to paralyse reforms?

The Behaviour of some Compounds of Iron in Artificial Digestion

At a recent meeting of the Reale Accademia di Medicina in Turin an important paper on the above subject was communicated from the Chemico-Physiological Laboratory directed by Dr Piero Giacosa, Professor of Materia Medica in the sub-Alpine school The researches and conclusions which it embodied were the work of Signor Gola, student in medicine He examined various specimens of the albuminates of iron of commerce or as prepared by himself in the laboratory according to the prescribed methods, and thereafter he examined the peptonates and the "ferratin" of commerce Besides the "classical reaction" of the sulphide of ammonium he employed a new reaction of Macallum, modified by Marfori to distinguish the organic from the inorganic compounds of iron This reaction consists in the addition to the ammoniacal solution of the preparation in question of some drops of an aqueous solution of hæmatoxylin which is coloured blue with the inorganic and a violet red with the organic compounds of iron He concluded that the albuminates have reactions of organic iron, while the peptonates and the "ferratin" of commerce comport themselves like the common citrates and lactates of iron Reverting to the researches of Professor Cervello of Palermo on the absorption of medicinal iron in the intestine he took the various compounds already studied and the citrate the lactate, and the perchloride of iron and subjected them to artificial digestion with albumin in gastric juice and in pancreatic juice and to the double gastric and pancreatic digestion The results were these the albuminates, the peptonates, the "ferratin," and the perchloride of iron, mingled with albumin, yield, after digestion, a reaction of organic iron, while the citrate and the lactate preserve their inorganic nature, the transformation takes place if the albumin is mingled with the preparation *in vitro digestionis*, whence may be deduced a confirmation of the old practice of exhibiting the preparations of iron at meals rather than in the fasting stage

"Cholera in Poultry"

In spite of a "full-dress debate" in which the leading bacteriologists of the sub-Alpine school took part at a largely attended meeting of the Reale Accademia di Medicina the etiology and pathology of this very serious epidemic remain *in statu quo* There is, in fact, nothing to add to the brief summary of Dr Mazza's paper and its criticism by Professor Perroncito and Dr Abba published in THE LANCET on June 3rd The weighty authority of Dr Foà, professor of pathological anatomy, was given in favour of the non-choleraic view of the origin and character of the disease, while this may be held to have been balanced by the equally authoritative evidence of Dr Belfanti of the Milanese Bacteriological Institute who found what he claimed as the cholera bacillus in the infected poultry In his summing up the President (Professor Bozzolo) recommended further investigation

June 12th.

[1] THE LANCET Oct 22nd 1898, p 1093.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT)

Health of Sydney

THE quarterly report of Mr T M Kendall, medical adviser to the Board of Water supply and Sewerage, Sydney, showed that the population of the metropolitan area had considerably increased—to the extent of 11,800 persons The number of deaths from all causes was greater than the total for the corresponding quarter of last year, the chief increase being from whooping-cough, measles, typhoid fever, and phthisis The mortality from diarrhœa had notably diminished A careful inquiry was made into the circumstances of the 41 cases of fatal typhoid fever and it was found that in 21 cases sewers had not been laid, in two cases sewers had been laid but the houses had not been connected, while 17 cases occurred in insanitary dwellings No fatal cases occurred in dwellings properly provided with sanitary appliances

Health of Melbourne

From the annual report of the medical officer of health of the city of Melbourne it appeared that the total number of deaths for the year was 1196, a considerable increase on the average of the last few years, the rate being 16 9 per 1000 The concurrence of epidemic outbreaks and unprecedentedly high temperature was regarded as the cause of the increased mortality The chief causes of death were typhoid fever, measles whooping cough, diphtheria, croup, and influenza There was a considerable increase in infantile mortality, chiefly from diarrhœal diseases As usual, tuberculosis caused the greatest number of deaths

The Medical Curriculum of the Melbourne University

The course of study at the Melbourne Medical School has been for many years felt to be inconvenient and unsatisfactory and the Faculty of Medicine has been discussing the subject for some months past, especially with the object of bringing the curriculum more into harmony with the recommendations of the General Medical Council of the United Kingdom The Faculty has drawn up a report which has been presented to the council of the University The Faculty finds three chief faults in the present curriculum—(1) the working year is too short, (2) it is overcrowded with systematic lectures, and consequently (3) there is not sufficient time for practical work, particularly clinical work

The Faculty recommends that the working year be lengthened so as to comprise three terms of ten weeks each The main examination would thus be placed in the middle of November instead of the middle of October The supplementary examination or second trial would be put in its old place at the beginning of March lectures being delayed one week for its completion Final honours would be held simultaneously with the main pass examination, under the same conditions as pass and honours in the earlier years of the curriculum. To lighten the course materia medica would cease to be a subject of lectures at the University the practical course at the School of Pharmacy being compressed and improved. Junior anatomy and senior anatomy would

be reduced from three to two lectures a week. Regional and applied anatomy and dissections of the fourth year would be abolished The routine work of practical pathological histology would be transferred from the fourth year to the third. Therapeutics dietetics and hygiene obstetrics and diseases of women would extend over two terms instead of three medicine and surgery would be one year's courses instead of two forensic medicine lectures would be reduced to one lec ure instead of three lectures a week But better practical teaching would be aimed at in all subjects. Thus the hospital work of the second year would be reduced to two terms and preceded by a general anatomical excursus. Special tutorial instruction in elementary surgery and elementary medicine would be required during two terms in the second and third years respectively Practical demonstra tions in therapeutics dietetics and hygiene would occupy one term practical gynæcology would be compulsory an attempt would be made to constitute a course of practical demonstrations in forensic medicine and partly optional classes would be established in diseases of children diseases of the eye, diseases of the skin and mental diseases. The Faculty finds that under existing regulations the number of Bachelors of Medicine and Surgery who proceed to higher degrees is extremely small. The conditions imposed on candidates for M D are very rigid, very troublesome without a corresponding amount of efficiency The Faculty advises a complete alteration in the requirements for the degree of Doctor of Medicine and a modification of those for the degree of Master of Surgery For the Doctorate it recommends a thesis in any subject of the medical curriculum with an examination in clinical medicine, such examination being dispensed with when the thesis is of great merit and originality For the Mastership it suggests the elimination of logic the simplification of the examination in surgery (without any reduction in standard) and the grouping of surgical anatomy and pathology into one subject, so that excellence on one side would atone for some degree of weakness on the other In the clinical examinations students of special departments would have certain privileges

The proposals of the Faculty were sharply criticised in the Council, objection being taken that too much time and attention were given to biology and physics in the first year and that the final year was still too much occupied with systematic lectures After discussion the Council accepted the proposed curriculum, subject to the consideration of the details of the science subjects of the first year The senate will now have to deal with the matter and further opposition to the Faculty's proposals is anticipated

The Sydney Medical School

The April number of the *Australasian Medical Gazette* contains an editorial article on the Sydney Medical School in which attention is drawn to the overcrowding of the pro fession by locally educated men and the question is asked, "What useful contributions have been made by the professorial staff of the Medical School to the advancement of medical science? What have we to show for the £80,000 spent on the Medical School?" and the reply is "Nothing whatever—but the overcrowding of the profession and the impoverishment of the majority of efficient and hard working medical practitioners" The professorial staff will probably reply to this attack in suitable fashion, but it may be pointed out that a good deal of original work of value has been done in the Sydney Medical School by Dr Anderson Stuart, Dr C J Martin, Dr Wilson, and others, and that the burden of teaching under the present conditions is too great to allow leisure for much original research

Dispute at the Yarra Bend Hospital for the Insane, Melbourne

The members of the Public Service Board of Victoria have been holding an inquiry into certain charges laid by the matron of the Yarra Bend Hospital for the Insane against the medical superintendent, Mr W L Watkins, who had been suspended from duty pending the board's inquiry The charges were (1) assaulting the matron and (2) want of tact and temper in carrying out his duties The alleged assault consisted in pushing the matron out of a ward after she had refused to leave when so ordered by Mr Watkins The evidence disclosed that the relations between the matron and the medical superintendent had not been satisfactory for some time past The board considered the charges proved and as a punishment reduced Mr Watkins's salary from £850 to £820 a year The board also held that the matron had been guilty of insubordination and insulting conduct and as she was over 60 years of age advised that she should be retired from the public service

Hospital Intelligence

The annual report (the nineteenth) of the Sydney Hospital for Sick Children showed that during the past year 385 patients had been admitted, making, with the 44 remaining from the previous year, a total of 429 patients under treatment Of this number 240 were discharged cured, 66 were relieved, 33 were discharged unrelieved 50 died and on Dec 31st, 1898, there were 40 remaining in the hospital 151 had been admitted to the diphtheria cottage, making, with the five remaining from the previous year, a total of 156 patients under treatment Of these 125 were discharged cured, 26 died, and on Dec 31st there were five remaining in the wards There had been 10,885 attendances on 4082 out-patients The death rate in the general hospital during the year was 9 per cent, a slight reduction on the previous year's rate of 9 88 per cent In the diphtheria wards the death rate was 17 2 per cent, as compared with a rate of 18 78 per cent for the previous year The Government propose to remove the Diphtheria Hospital (a sort of offshoot from the Children's Hospital) from the Glebe. It is proposed to erect a sanatorium and hospital for infectious diseases on a site of 40 acres at Kensington A deputation from the staff of St Vincent's Hospital, Sydney, waited on the Colonial Secretary recently to ask for a grant of £2000 to build a new operating theatre The hospital did not receive the ordinary assistance given to other hospitals The Minister said that he was thoroughly in sympathy with the request which he would place before his colleagues At the Sydney Hospital the following gentlemen were re-appointed to their respective positions on the honorary medical staff, viz —Dr Jarvie Hood, physician, Dr F W Hall assistant physician, Dr W H Goode, surgeon, Dr H L Maitland, assistant surgeon, Dr Ralph Worrall, gynæcological surgeon, Dr W G Armstrong, assistant gynæcological surgeon, Mr. A J Brady, aural surgeon, Dr W C Wilkinson, assistant aural surgeon, Dr Sydney Jamieson director of the pathological department, Dr Gordon MacLeod, assistant ophthalmic surgeon

Death of Mr Maurice John O'Connor

General regret was felt when it was known that Mr Maurice J O'Connor had succumbed to an attack of pneumonia in his forty second year He was a native of Sydney and entered the Sydney Hospital as a surgeon's apprentice Later he went to Dublin, where he graduated On his return he was appointed surgeon to Darlinghurst Gaol, which position he held until quite recently, when he was transferred to Parramatta The deceased gentleman was for some time senior surgeon at the Sydney Hospital and representative of the staff on the Board of Directors He was also a member of the Medical Board of New South Wales

Presentation to Mr G A Syme

On May 4th between 70 and 80 members of the profession in Melbourne entertained Mr G A Syme, M S, F R C S Eng, to supper and made him a presentation of an address and a piece of plate on the occasion of his approaching marriage Mr Charles Ryan occupied the chair and spoke in flattering terms of Mr Syme's high status in the profession and the personal esteem in which he was held

May 10th.

UNIVERSITY OF CAMBRIDGE —Mr W Chawner, Master of Emmanuel College, has been appointed Vice-Chancellor for the next academical year —Courses of in struction will be given during the Long Vacation in the departments of pathology, anatomy, and chemistry —Professor Foster and Dr D MacAlister have been appointed electors to the new chair of Agriculture —Mr A E Shipley of Christ's College has been reappointed Lecturer in the Morphology of Invertebrata —It is proposed to spend some £600 in increasing the accommodation of the new chemical laboratory for elementary students, whose numbers have increased beyond what was thought probable when it was erected and equipped some years ago —The Mathematical Tripos is rendered noteworthy this year by the appearance of a "bracket" for the senior wranglership, Birtwistle of Pembroke and Paranjpye of St John's dividing the highest honours The latter is the first native of India to attain the distinction —Dr Donald MacAlister is appointed a member of the new Board of Agricultural Studies — At the congregation on June 8th the following medical degrees were conferred M D A. P Beddard, M A, Trinity, G M Scott, B A, Peterhouse, and F W Garrad, B A, Clare M B and B C F A Allfrey, B A, Trinity, E R. Hunt, B A, Trinity, H. A Gaitskell, M A., Clare, E P Sewell, B A, Pembroke, A M Ware, M A, Pembroke, A E Carsberg, B A, Caius, and H F Parker, B A, Emmanuel M B only P R Lowe, B A, Jesus B C only J H Kemp, B A, Clare —Mr Timothy Holmes, M A., F R C S Eng and Mr Clinton T Dent, M.A, F R C S Eng, of St George's Hospital, have in virtue of their contributions to surgery been approved for the degree of Master of Surgery

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION

THURSDAY, JUNE 8TH

THE Council met to-day half an hour earlier than usual, with the hope that the extra time might enable them to complete the business of the session—a hope which was not fulfilled The President, Sir WILLIAM TURNER, occupied the chair

New Member

The PRESIDENT announced that this morning a communication had been received from the University of Oxford to the effect that Dr Church had resigned his position as representative of the University and that Dr Joseph Frank Payne had been appointed in his stead He was sorry to think that they were going to lose the services of Dr Church but they must accept what the University of Oxford had done

The REGISTRAR then read the official notification of the new appointment and Dr Payne was introduced to the President and the Council by Sir Dyce Duckworth and took his seat at the table

The College of Preceptors

The Council having sat *in camera* for about three-quarters of an hour,

Sir JOHN BATTY TUKE moved, Dr MACALISTER seconded, and it was agreed to

That the letter forwarded with certain documents (Memorandum and Statement) to the President by the Secretary of the College of Preceptors, together with the President's reply thereto read to the Council *in camerâ*, be entered in the minutes of the Council.

The communications were —

(*a*) LETTER FROM THE COLLEGE OF PRECEPTORS TO THE PRESIDENT

College of Preceptors, Bloomsbury square, London, W C,
April 21st, 1899

To Sir WILLIAM TURNER, President of the General Medical Council.

SIR,—I am directed by the Council of the College of Preceptors to submit to you a statement of the reasons which compel them to protest against the conclusions arrived at in the Report of the Education Committee which was adopted by the General Medical Council at their meeting in November last.

The resolution which was passed by the Medical Council at their meeting in November 1897 notified that "on and after the first day of January 1899 no certificate of lower standard than that of the matriculation or entrance and the junior local examinations of the universities of the United Kingdom will be accepted for registration" and in the report of the Education Committee on which this resolution was founded the College of Preceptors second-class examination (first or second division) was asserted to be of lower standard than the University junior local examinations.

This ruling the Council of the College of Preceptors found it impossible for them to accept without protest and they submitted to the Medical Council in March, 1898, a "Statement respecting the standard of the College of Preceptors Second Class Examination as compared with that of the University Junior Local Examinations, which showed conclusively by statistics of age and candidates, by statistics of passes and rejections by the recognition accorded to the certificates by important public bodies, and by other considerations, that their Second Class Examination (1st or 2nd division) was not of inferior standard to that of the University Junior Local Examinations. They further proved that the Medical Council in arriving at their decision had been misled by an entirely inaccurate statement in the report of the Education Committee (November 1897) to the effect that the University Junior Local Examinations were intended for students who had at least attained the age of 16 years."

In the report drafted by Dr MacAlister (at that time a member of the syndicate for the Cambridge local examinations) and adopted by the Medical Council in November last the facts brought forward in the college statement" were not impugned. But an indictment was drawn up against the college examination which was based on the following grounds:—

(1) That an undue proportion of cases of defective general education reported by the professional examining boards had been traced to the College of Preceptors examination.

(2) That an inspection of examination papers and of candidates answers and a consideration of the pass standards had convinced the committee tha the College of Preceptors examination was inferior to the standard desired by the Council.

(3) That the pass-standards of the College of Preceptors are in many respects inferior to those of the University Junior Locals, the average age of the candidates who offer the subjects required by the Medical Council less, and the proportion of rejections smaller while the papers are in general of a more elementary character

"(4) That the opinion of school masters supported the contention of the drafter of the report."

With regard to (1) it is shown in the accompanying Memorandum (pages 2–4) that the figures on which the conclusions of the report were based are absolutely incorrect, while no account whatever had been taken of the proportion of the reported candidates to the number qualified by the several examinations under consideration.

With regard to (2) it is impossible that the implied and necessary comparison can have been made as it has been ascertained from the chairman of the Education Committee that no inspection of candidates answers has been made in the case of the University Local Examinations. The meaning of the expression standard desired by the Medical Council" is not clear If the standard is that of an examination intended for students who had at least attained the age of 16 years," then neither the college second class nor the University Junior Locals conform to the desired standard But if the expression is only used to indicate the standard adopted by the Medical Council (that of the University Junior Locals) then the college Second Class Examination (1st or 2nd division) has been proved to be equal to the desired standard

With regard to (3) it is shown in the accompanying Memorandum (page 6) that the categorical statements made by the drafter of the report are contrary to fact. Further that these statements were made in face of the full details as to standards, methods, and statistics," which are stated in the report to have been communicated to the Education Committee.

With regard to (4) reasons are given in the Memorandum (pages 7 and 8) why but little importance should be attached to anonymous opinions solicited in the manner indicated expressed for the most part in a way by no means judicial and contradicted as they are by the carefully considered and publicly expressed opinion of important public bodies.

The council of the college having thus pointed out the serious errors of statement and of fact which are found in the report, confidently appeal to the President of the Medical Council to deal with the matter in such a way as will result in the practical revision of the report and of the conclusions arrived at on incorrect data. It is impossible to suppose that the Medical Council would desire even in the smallest particular to act unjustly towards another public body which has stood in responsible and friendly relation with them for more than 16 years and which has no right of appeal nor opportunity of making its voice heard at the Council on a matter in which its reputation as an examining body is vitally concerned. In view of the facts set out in the Memorandum and especially of those mentioned on page 6 the council of the college venture to hope that you as President of the Medical Council may find it possible to refer the question at issue to the whole Council or to a committee so constituted as to ensure an impartial consideration of it.

The Council observe that in the case of professional examinations it is the custom of the Medical Council before publishing a report to submit it for remark to the examining body concerned and they would point out that if this practice had been followed in the case of the Education Committee's reports for 1897 and 1898 the errors referred to above would have been detected before their publication.

I have the honour to be Sir your obedient servant

C R. HODGSON Secretary

(*b*) ANSWER BY THE PRESIDENT.

No 10,079 General Council of Medical Education and Registration of the United Kingdom,
299 Oxford street London W.,
June 8th 1899

SIR,—Referring to your letter of April 21st, in which on behalf of the council of the College of Preceptors you protest against the conclusions arrived at in the report of the Education Committee which was adopted by the General Medical Council in November last I have to state that I remitted your letter and the two prints marked respectively Memorandum" and Statement" to the chairman of the Education Committee of this Council with the request that the committee would furnish me during the present session with any observations they might wish to make.

I am now in a position to state that the Education Committee have given careful consideration to your letter and the accompanying prints.

(*a*) With regard to the question which was raised by your council as to the want of correctness in the description of the returns alluded to in Section I 1 of the Education Committee's report of November last, I would state that when the matter was brought to my notice some months ago I sanctioned the necessary correction to show that the description applied, not only to the returns from the examining boards of the medical services of the navy, army and India, but also to other examining boards. This correction was made in the report before it appeared in Volume xxxv of the Minutes.

(*b*) The Education Committee have called my attention to differences between the table of returns printed in your Memorandum and that drawn up by the Registrar of this Council and submitted to the committee. In your table the mode of classification adopted differs from the Registrar's and a large number of cases assignable to obsolete examinations are included as well as, under a special heading a number of cases not traced. Thus the Registrar's table refers to 48 cases, yours to a total of 24 The Education Committee do not however admit that the method of classification adopted by your college is proper for it purports to relieve the college of all responsibility where it granted partial certificates to defective candidates. The committee also are of opinion that the inclusion of the additional cases either traceable to obsolete examinations, or untraced to any examination or which possibly may have been overlooked by the Registrar while it doubtless adds to the completeness of the table, appears to have no bearing on the point in support of which the returns were cited and does not affect the conclusions drawn from them. The committee consider that if the table of your college were taken as the basis of enumeration it would still be apparent that among the examinations now on the list of the Medical Council that of your college is responsible wholly or partially for nearly one half of all the reported case. whilst the Junior Local Examinations have not given rise to a single case of complaint. These were the original conclusions arrived at by the committee.

Following the mode of reckoning suggested in the letter of the Dean of your college the cases of failure, total or partial assignable to your examination are, the committee state, some 18 out of over 2000 whilst those assignable to the Local Examinations are none out of over 400 The comparison of percentages would thus appear to lead to the same result as that of totals.

(*c*) From confidential communications made by the Universities authorities conducting these local examinations the committee had the opportunity of inquiring into the standards and methods of

marking and the conclusion come to that the requirements of the local examinations were very much higher than those of the college was not based on the opinion of an individual member of the committee but on the information submitted to the committee as a whole. The percentage of passes to rejections among candidates who presented themselves at the local examinations of the two universities in the subjects required by this Council was also before the Education Committee and in their judgment bore out the conclusion that the examination of the College of Preceptors was less stringent than those of the universities

(*d*) The Education Committee have drawn my attention to the manner in which, both in the "Memorandum" and Statement of your college, an erroneous interpretation is put upon the expressions which the committee has employed in regard to the age standard of candidates for the Junior Local Examinations. The committee used the age of 16 as marking a well understood period of school life and stated in previous reports that the examinations they approved were such as were adapted to that age. They have also referred to a paragraph in their report of November 1896 (vol. xxxiii of the Council's Minutes, p 468) in which they divide the examinations into two groups and to another in their report of November 1897 (Minutes, vol xxxiv p 449) in which they define their view of the status of the examinations which should be recognised as expressing their position and they hold that these paragraphs should be read together

(*e*) The Education Committee point out that the suggestion that the opinion of teachers should be ascertained on the relative merits of the examinations under consideration came from the College of Preceptors. They are satisfied that the answers received in reply to Dr MacAlister's circular were fairly elicited and that they are not open to the disparaging comments made in the Memorandum. The names of the teachers and of the schools over which they preside are in the possession of the committee and the expression employed in the Memorandum that their views are the irresponsible opinions of anonymous individual schoolmasters is not justified

(*f*) The Education Committee cannot admit that the College of Preceptors has established its claim to have its Junior Examination recognised as equivalent to the Junior Local Examinations or that if the College of Preceptors Second-class Examination ceases to be recognised by this Council, the Junior Locals should also be removed from the Council's list, inasmuch as no complaint regarding the scope and efficiency of the latter has been raised.

(*g*) I would assure the College of Preceptors that neither the Medical Council nor its Education Committee desire, even in the smallest particular to act unjustly towards the College of Preceptors in the matter of the examinations conducted by them As regards the remark made in the last paragraph of your letter that in the case of professional examinations the Medical Council before publishing a report, submits it for observation to the examining body concerned and that it might have been well if this practice had been followed in the case of the Education Committee's reports for 1897–8 I would point out to you that the submission of the reports on professional examinations to the bodies inspected is required in Section iii 3, of the Medical Act of 1886 and that there is no provision in that Act which requires, or even suggests a similar action on the part of the Council in connexion with preliminary examinations.

(*h*) I may take this opportunity of stating that the Medical Council has placed at the disposal of the Education Committee a sum of money to enable that committee during the current year to obtain expert assistance in the examination of the regulations, requirements standards, &c. as well as the answers and markings of candidates of the several preliminary examinations.

I would further call your attention to the statement in the closing paragraph of the Education Committee's Report of 1898, that should the authorities of the College of Preceptors see fit to establish a Preliminary Examination of a standard equal or superior to that of the other Junior Examinations recognised by the Council, the committee would be prepared to include such an improved examination in the List." I am Sirs, yours faithfully

WILLIAM TURNER,
President of the General Medical Council.

C R. Hodgson Esq

Election of the Executive Committee

The following members were elected by ballot to form the Executive Committee—viz Sir Dyce Duckworth, Mr Bryant, Mr Carter, and Dr Glover for England, Dr Heron Watson and Sir William Gairdner for Scotland, and Dr Atthill and Sir Philip Smyly for Ireland In announcing the result of the ballot the President explained that all the old members had been re-elected

The Pharmacopœia

Dr LEECH brought up the following report from the Pharmacopœia Committee, viz —

The Pharmacopœia Committee beg leave to report that 26,500 copies of the British Pharmacopœia of 1898 have been printed and 25,225 of these have passed into circulation, leaving in hand only 1275 copies; it is therefore evident that at an early date a further re-issue will be needed

The Pharmacopœia Committee note with satisfaction that the Legislatures of Queensland and of Victoria have sanctioned Acts which provide for the adoption of the British Pharmacopœia in Queensland and Victoria respectively

In accordance with the report of the Pharmacopœia Committee adopted by the Council in November 1898 the Pharmaceutical Societies of Great Britain and Ireland were invited to appoint representatives to confer with the members of the Pharmacopœia Committee and nominated Mr C Ekin Dr W Inglis Clark and Mr R. J Downes to act in this capacity A conference has been held at which Dr Leech Dr MacAlister and Dr Tirard (secretary) met the above-named representatives and discussed numerous points connected with subjects dealt with in the Pharmacopœia

It is recommended that the Pharmacopœia Committee be allowed to authorise the publication of reports received from experts in pharmacy and pharmaceutical chemistry upon matters deemed worthy of investigation

The President has addressed a letter to the Lord President of the Privy Council requesting that a report upon the Indian and Colonial Addendum should be forwarded through the Privy Council to the Indian and Colonial Authorities. Communications have been received from the India Office and from the Colonial Office expressing readiness to comply with this request

The report has been widely circulated copies having been sent to about 900 medical and pharmaceutical authorities and experts in India and the British colonies.

Valuable criticisms and suggestions have already been received from some of the Indian and colonial medical authorities and also from Surgeon General G Bidie (Retd).

A comprehensive committee has been formed in Canada to consider what additions it is desirable to make to the Addendum in order to adapt the Pharmacopœia to the requirements of the Dominion and a preliminary report has already been received from this body

After the various communications have been considered by the Pharmacopœia Committee a draft Indian and Colonial Addendum will be drawn up and submitted for the approval of the Council. But much time must elapse before all the comments can be received and considered and it will probably be found impossible to present the draft Addendum at the November meeting of the Council

Dr LEECH, in moving the adoption of the report, said it would be seen that the circulation of the Pharmacopœia was going on in a very satisfactory manner, and he thought the Council was to be congratulated on the fact that the work would be at least no burden on the funds of the Council There was only one point to which he desired to call attention The committee had submitted certain questions to experts and they desired to have power to publish their replies without necessarily coming to the Council for sanction It was considered that there would be considerable advantage in having the replies published at once instead of waiting for another meeting of the Council He might add that none of the property of the committee was destroyed in the fire at Messrs Spottiswoode's

The report was at once adopted

The Finances of the Council

The following report by the Finance Committee was received and entered in the minutes, viz —

The Finance Committee report that the income of the General and Branch Councils for the year ending Dec. 31st, 1898, was £14 629 3*s.* 3*d.* and the expenditure for the same period having been £13,905 10*s* 2*d.*, there is a surplus of £723 13*s.* 1*d.* From Table A it will be seen that this is chiefly due to the publication of the new Pharmacopœia. From the same table it will also be seen that the fees received by the branch councils again show a slight decrease, for £273 5*s* less was received from that source in England and £13 2*s.* 6*d* less in Ireland, while Scotland shows an increase of £172 2*s.* 6*d*, the total decrease therefore being £114 5*s* These figures would seem to show that though the fees will probably continue to decrease slightly each year owing to the increasing stringency of the conditions of qualification, yet the effect of the introduction of the five years rule has now passed, for the decrease in fees in 1897 was £779 12*s* 6*d*

The items of increased expenditure are shown on Table B and amongst these may be specified the following —

(*a*) An increase of £1214 8*s* 2*d.* for General Council fees and of £122 4*s* 8*d.* for Executive Committee fees, occasioned by the extra session of the Council and the length of its meetings the Executive Committee also met in July whereas last year (1897) it did not meet between the May and November sessions.

(*b*) An increase of £2454 18*s* 2*d.* for the British Pharmacopœia, due to the cost of publishing the new work

(*c*) An increase of £171 15*s* 11*d.* in the cost of printing the Medical and Students Registers regarding which the Stationery Office writes: 'This is the first supply under a new contract, and the charge is higher than usual on account of this office having to pay full printing composition rates. During the currency however, of the new contract the charge for future editions will be considerably lower"

(*d*) An increase of £223 6*s.* in the inspection of examinations owing to the scheme regarding the Apothecaries Hall, Ireland, having come into force.

(*e*) An increase of £138 2*s* 7*d.* in miscellaneous expenses occasioned chiefly by the issue of the circular regarding the employment of unqualified assistants and partly also by the extra session of the Council

On the other hand decreased expenditure has to be noted:—

(*a*) In salaries, £601 10*s.* 1*d.*

(*b*) In law expenses, £133 17*s.* 11*d.*

Table C shows that the average yearly expenditure of the General and Branch Councils for the past seven years has exceeded the average yearly income by £310 13*s*

The "percentage rate which shows what part of the 'moneys received by the several branch councils" has, pursuant to Section 13 of the Medical Act, 1858, been paid towards defraying the General Council's expenses was considerably lower during the past year having been 71·69 as against 109 89 in 1897, caused by the receipts having been increased by the refunding of the money expended on the British Pharmacopœia in the last few years. The auditor recommends that in future the money spent in the preparation of a Pharmacopœia should not be charged as part of the expenditure of the year but should be carried forward until the book is published the violent fluctuations of receipts and expenditure which now take place would thus be avoided and a comparison of the figures, year by year would be more simple

With regard to the current year all the items of increased expenditure may reasonably be expected to show a decrease some of them to a considerable extent with the exception of the Inspection of Examinations (the Apothecaries Hall, Dublin) and the interest payable on the mortgage.

The latter item will be increased on account of the additions to the

building—for which a sum not exceeding £3000 is allowed—and the Sinking Fund that has been approved of to pay off the debt to the English Branch Council, will probably cause an additional annual expenditure of about £215.

With regard to the British Pharmacopœia, there will be some payments to be made in connexion with the preparation of the Indian and Colonial Addendum but these will probably be more than balanced by the sale of the Pharmacopœia itself for the whole of its preparation having been charged against the first edition all future reprints show a profit of about 4*s* 6*d*. per copy

Looking at the matter generally it is unlikely that the Branch Councils will be called upon to increase their contributions at the end of the current year and it is possible that the amounts may even be reduced

The position, however of the Irish Branch Council in regard to finance requires careful consideration. Its estimated contribution for the current year is £374 5*s*. which includes a deficiency in last year's contribution brought forward of £234 3*s*. 11*d* Its income last year was £102 19*s* 1*d*. Assuming therefore that the income this year will be approximately the same, there will be a deficiency of £171 5*s*. 11*d*, which will reduce the assets to £113 3*s*. 11*d*., and at the end of the year 1900 unless a great alteration takes place, the position will be grave. In 1896 the assets of the Irish Branch were £801 18*s*. 5*d*. they are now £284 9*s* 10*d* or, in other words, in two years the assets have decreased £517 8*s*. 7*d*.

Table E shows the assets of the three Branch Councils and the Dental Fund at the close of the last three years respectively from which it will be seen that the English Branch Council has increased by £296 11*s*. 3*d* and the Scottish Branch Council by £40 0*s*. 5*d*., while the Irish Branch Council has decreased by £129 12*s*. 1*d*. making a total increase of £207 The Dental Fund has decreased by £97 19*s* 8*d*.

Dental Finance.—Table D shows that the receipts of the Dental Registration Fund for the year ending Dec. 31st, 1898, were £806 14*s* 2*d*. and the expenditure being £704 13*s* 10*d*. is thus £102 0*s* 4*d*. less than the income.

The Finance Committee add the following special report in regard to the formation of a sinking fund prepared pursuant to the following resolution of the Council adopted on Dec. 1st, 1898:—

That the Council approve of the proposal to form a Sinking Fund for the repayment of the English Branch Council at the end of a term of years of a sum of £25 000 and that the Finance Committee be authorised to obtain from an expert a report to be laid before the Council on the methods of carrying the proposal into effect.

REPORT OF THE ACTUARY OF THE LONDON ASSURANCE CORPORATION

The English Branch Council have advanced to the General Medical Council the sum of £25,000 for the purchase of a freehold and the erection of a building. That sum, according to the resolution of the Council adopted on Dec. 1st 1898, is to be repaid at the end of a term of years and I am requested to advise as to methods of such repayment on the basis of that term being one of 50 years.

At present the General Medical Council pays the English Branch the sum of £750 per annum as interest.

Repayment may be effected in any one of three ways:

1 By an annuity arranged between the General Medical Council and the English Branch Council without the intervention of a third party

An annuity of £971 12*s* 9*d*. (being only £221 12*s*. 9*d*. more than the amount now payable for interest alone) paid by the General Medical Council to the English Branch Council at the end of each year for fifty years would liquidate the debt with 3 per cent. interest. Under this plan each payment of the annuity includes an instalment of principal as well as interest at 3 per cent. on the outstanding balance of the debt In the early years when a large amount of debt is outstanding, the greater part of the annuity is absorbed in interest and but a small amount is available in repayment of principal but as time goes on a less amount is required for interest and the instalments of principal increase. Careful bookkeeping would be required to distinguish the ever varying amounts of principal and interest and to guard against the principal being treated by the English Branch Council as income. Were the principal to be inadvertently spent as income then at the end of 50 years the English Branch Council would find that the £25 000 had vanished

2. Assurance by annual premiums

An assurance company in consideration of a premium of £215 12*s* 6*d*. payable at the beginning of each year for 50 years, will guarantee the payment of the sum of £26,000 at the end of 50 years. (The Alliance Company being suggested.)

By this plan no complicated bookkeeping would be required because the full debt would be repaid by means of the policy in a lump sum at the end of the 50 years.

3. Assurance by single premium

An assurance company in consideration of a single premium at the rate of £22 16*s* 3*d*. per cent will guarantee the repayment of a sum at the end of 50 years.

Under this plan the sum to be assured would be £32,388 13*s* 4*d*. so as to provide for the repayment of the premium as well as the debt The English Branch Council would have to advance the single premium of £7388 13*s* 4*d*. in addition to the £25,000, bringing up the debt to £32 388 13*s*. 4*d*. on which the General Medical Council would have to pay as interest to the English Branch Council the annual sum of £221 13*s*. 2*d*. in addition to the £750 already payable. No complicated bookkeeping would be required.

If the English Branch Council can conveniently find the additional sum of £7388 13*s*. 4*d*. required this plan seems the best. Not only is it the simplest, but a secure investment is found for the £7388 13*s*. 4*d*. at 3 per cent. compound interest for 50 years—a much better return than on Consols. In these days of a falling rate of interest this is an advantage not to be despised.

GEORGE KING Actuary

7 Royal Exchange London E.C April 5th, 1899

Mr BRYANT moved, Sir DYCE DUCKWORTH seconded, and it was agreed to —

That, in accordance with the recommendation of the auditor the money spent in the preparation of the British Pharmacopœia should not be charged as part of the expenditure of the year but should be kept as a separate account.

Mr BRYANT moved —

That the treasurers be requested to carry out the resolution of the Council as to the formation of a sinking fund by the adoption of the second method mentioned in the report of the London Assurance Corporation—viz. the payment of an annual premium of £215 12*s*. 6*d* for a period of 50 years

Mr Bryant explained that the committee had come to the conclusion that it would not be expedient to diminish the capital of the Council, which at present amounted to about £12,000, by so large a sum as £7388

Sir DYCE DUCKWORTH seconded the motion and it was agreed to

Mr BRYANT, in reference to the drop in the assets of the Irish Branch Council from £801 18*s* 5*d* in 1896 to £284 9*s* 10*d* in 1898, moved

That the question of the financial condition of the Irish Branch Council be referred for consideration to the Finance Committee (with power to take legal advice) and report to the General Council

The PRESIDENT asked if any of the Irish representatives could explain the extraordinary drop in their assets of £517 in two years

Dr LOMBE ATTHILL said that the receipts of the Irish Branch Council last year and the year before had not been so good as formerly, owing, he thought, to a considerable percentage of Irish students going to Scotland to obtain their degrees He had been a member of the General Medical Council for a good many years and when he first entered it the Irish Branch Council had as much as £1000 at its credit, but expenses had been so heavy and the revenue had so decreased that that balance had almost disappeared, and at present they had a balance of only some £200 The General Medical Council might take it that so soon as they got a little money together they would remit, for it was their desire to be as honest as poor men could be They certainly would pay every shilling that they could

Sir CHRISTOPHER NIXON said that perhaps properly the Irish Branch Council was represented as an impecunious body, but in answer to the President's question as to why they were in this distress he must say that it was the history of what usually took place when there were any financial relations between England and Ireland He should venture to suggest that the question should be dealt with by the committee which it was to be proposed should consider amendments of the Medical Acts

Sir PHILIP SMYLY pointed out that the Irish Branch Council had no power of increasing its income from registration, but he did not believe that the revenue of that Council would diminish very much more On the contrary, he hoped —and he did not think it was a hope without some good ground—that the funds of the Irish Branch Council would increase

Sir DYCE DUCKWORTH thought that the history of the Council during the last 15 years explained the expenditure What he wanted to know was why such a large number of Irish students should go to Scotland to seek a diploma

Sir CHRISTOPHER NIXON The education is cheaper and the examinations are easier to pass

Dr MCVAIL said that that was not so

The recommendation was adopted

Mr BRYANT next moved

That the other portions of the Finance Report be approved and adopted

In answer to Mr HORSLEY Mr BRYANT stated that the Council had not paid the lawyers' accounts for the year 1898.

The REGISTRAR explained that the Council was always a year behind in the payment of the accounts of their legal advisers

Mr HORSLEY thought that that fact ought to be borne on the face of the accounts

The motion was agreed to and the report of the Finance Committee, with its several recommendations was passed

The Penal Cases Committee

The PRESIDENT announced that the result of the ballot for the election of the Penal Cases Committee was that the four representatives for England were Mr Bryant, Mr Brudenell Carter, Dr Glover, and Mr Horsley, and that the two Scotch representatives were Dr Heron Watson and Dr Bruce As to the Irish representation on the committee Sir William Thomson was distinctly elected, but there was a tie in the voting as respects Dr Lombe Atthill and Sir Christopher Nixon

Dr LOMBE ATTHILL I wish that Sir Christopher Nixon should be the member of this committee

Sir CHRISTOPHER NIXON I should like that Dr Atthill would undertake the duty

marking and the conclusion come to that the requirements of the local examinations were very much higher than those of the college was not based on the opinion of an individual member of the committee but on the information submitted to the committee as a whole. The percentage of passes to rejections among candidates who presented themselves at the local examinations of the two universities in the subjects required by this Council was also before the Education Committee and in their judgment bore out the conclusion that the examination of the College of Preceptors was less stringent than those of the universities

(*d*) The Education Committee have drawn my attention to the manner in which, both in the 'Memorandum" and Statement of your college, an erroneous interpretation is put upon the expressions which the committee has employed in regard to the age standard of candidates for the Junior Local Examinations. The committee used the age of 16 as marking a well understood period of school life and stated in previous reports that the examinations they approved were such as were adapted to that age. They have also referred to a paragraph in their report of November 1896 (vol xxxiii of the Council s Minutes, p 468) in which they divide the examinations into two groups and to another in their report of November 1897 (Minutes, vol xxxiv p. 449), in which they define their view of the status of the examinations which should be recognised as expressing their position and they hold that these paragraphs should be read together

(*e*) The Education Committee point out that the suggestion that the opinion of teachers should be ascertained on the relative merits of the examinations under consideration came from the College of Preceptors. They are satisfied that the answers received in reply to Dr MacAlister's circular were fairly elicited and that they are not open to the disparaging comments made in the Memorandum. The names of the teachers and of the schools over which they preside are in the possession of the committee and the expression employed in the Memorandum that their views are the irresponsible opinions of anonymous individual schoolmasters" is not justified.

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WILLIAM TURNER,
President of the General Medical Council

C R. Hodgson Esq

Election of the Executive Committee

The following members were elected by ballot to form the Executive Committee—viz Sir Dyce Duckworth, Mr Bryant, Mr Carter, and Dr Glover for England, Dr Heron Watson and Sir William Gairdner for Scotland, and Dr Atthill and Sir Philip Smyly for Ireland In announcing the result of the ballot the President explained that all the old members had been re elected

The Pharmacopœia

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The report was at once adopted

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The following report by the Finance Committee was received and entered in the minutes, viz —

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The items of increased expenditure are shown on Table B and amongst these may be specified the following:—

(*a*) An increase of £1214 8*s* 2*d.* for General Council fees and of £122 4*s* 8*d.* for Executive Committee fees, occasioned by the extra session of the Council and the length of its meetings the Executive Committee also met in July whereas last year (1897) it did not meet between the May and November sessions.

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(*e*) An increase of £138 2*s* 7*d.* in miscellaneous expenses occasioned chiefly by the issue of the circular regarding the employment of unqualified assistants and partly also by the extra session of the Council

On the other hand decreased expenditure has to be noted:—

(*a*) In salaries, £601 10*s.* 1*d.*

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Table C shows that the average yearly expenditure of the General and Branch Councils for the past seven years has exceeded the average yearly income by £310 13*s*

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With regard to the current year all the items of increased expenditure may reasonably be expected to show a decrease some of them to a considerable extent, with the exception of the Inspection of Examinations (the Apothecaries Hall Dublin), and the interest payable on the mortgage.

The latter item will be increased on account of the additions to the

building—for which a sum not exceeding £300 is allowed—and the Sinking Fund that has been approved of to pay off the debt to the English Branch Council, will probably cause an additional annual expenditure of about £215.

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Looking at the matter generally it is unlikely that the Branch Councils will be called upon to increase their contributions at the end of the current year and it is possible that the amounts may even be reduced.

The position, however of the Irish Branch Council in regard to finance requires careful consideration. Its estimated contribution for the current year is £874 5s., which includes a deficiency in last year's contribution brought forward of £234 3s 11d. Its income last year was £702 19s 1d. Assuming therefore that the income this year will be approximately the same, there will be a deficiency of £171 5s 11d. which will reduce the assets to £113 3s. 11d., and at the end of the year 1900, unless a great alteration takes place, the position will be grave. In 1896 the assets of the Irish Branch were £801 18s. 5d. they are now £284 9s 10d., or in other words, in two years the assets have decreased £517 8s. 7d.

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Repayment may be effected in any one of three ways

1. By an annuity arranged between the General Medical Council and the English Branch Council without the intervention of a third party

An annuity of £971 12s 9d. (being only £221 12s. 9d. more than the amount now payable for interest alone) paid by the General Medical Council to the English Branch Council at the end of each year for fifty years would liquidate the debt with 3 per cent. interest. Under this plan each payment of the annuity includes an instalment of principal as well as interest at 3 per cent. on the outstanding balance of the debt In the early years when a large amount of debt is outstanding, the greater part of the annuity is absorbed in interest and but a small amount is available in repayment of principal but as time goes on a less amount is required for interest and the instalments of principal increase. Careful bookkeeping would be required to distinguish the ever varying amounts of principal and interest and to guard against the principal being treated by the English Branch Council as income Were the principal to be inadvertently spent as income, then at the end of 50 years the English Branch Council would find that the £25,000 had vanished.

2. Assurance by annual premiums

An assurance company in consideration of a premium of £215 12s. 6d. payable at the beginning of each year for 50 years, will guarantee the payment of the sum of £25,000 at the end of 50 years. (The Alliance Company being suggested.)

By this plan no complicated bookkeeping would be required because the full debt would be repaid by means of the policy in a lump sum at the end of the 50 years.

3. Assurance by single premium

An assurance company in consideration of a single premium at the rate of £22 16s 3d. per cent. will guarantee the repayment of a sum at the end of 50 years.

Under this plan the sum to be assured would be £32,383 13s 4d. so as to provide for the repayment of the premium as well as the debt The English Branch Council would have to advance the single premium of £7383 13s 4d in addition to the £25,000, bringing up the debt to £32,383 13s 4d on which the General Medical Council would have to pay as interest to the English Branch Council the annual sum of £971 12s 2d, in addition to the £750 already payable. No complicated bookkeeping would be required.

If the English Branch Council can conveniently find the additional sum of £7383 13s 4d required this plan seems the best. Not only is it the simplest but a secure investment is found for the £7383 13s 4d. at 3 per cent. compound interest for 50 years—a much better return than is obtainable. In these days of a falling rate of interest this is an advantage not to be despised.

GEORGE KING Actuary

7 Royal Exchange, London E.C., April 5th, 1899.

Mr BRYANT moved, Sir DYCE DUCKWORTH seconded and it was agreed to —

That in accordance with the recommendation of the auditor the money spent in the preparation of the British Pharmacopœia should be charged as part of the expenditure of the year but should be kept as a separate account.

Mr BRYANT moved —

That the treasurers be requested to carry out the resolution of the Council as to the formation of a sinking fund by the adoption of the second method mentioned in the report of the London Assurance Corporation—viz. the payment of an annual premium of £215 12s 6d. for a period of 50 years

Mr Bryant explained that the committee had come to the conclusion that it would not be expedient to diminish the capital of the Council, which at present amounted to about £12,000, by so large a sum as £7383

Sir DYCE DUCKWORTH seconded the motion and it was agreed to

Mr BRYANT, in reference to the drop in the assets of the Irish Branch Council from £801 18s 5d in 1896 to £284 9s 10d in 1898, moved

That the question of the financial condition of the Irish Branch Council be referred for consideration to the Finance Committee (with power to take legal advice) and report to the General Council

The PRESIDENT asked if any of the Irish representatives could explain the extraordinary drop in their assets of £517 in two years

Dr LOMBE ATTHILL said that the receipts of the Irish Branch Council last year and the year before had not been so good as formerly, owing, he thought, to a considerable percentage of Irish students going to Scotland to obtain their degrees He had been a member of the General Medical Council for a good many years and when he first entered it the Irish Branch Council had as much as £1000 at its credit, but expenses had been so heavy and the revenue had so decreased that that balance had almost disappeared, and at present they had a balance of only some £200 The General Medical Council might take it that so soon as they got a little money together they would remit, for it was their desire to be as honest as poor men could be They certainly would pay every shilling that they could

Sir CHRISTOPHER NIXON said that perhaps properly the Irish Branch Council was represented as an impecunious body, but in answer to the President's question as to why they were in this distress he must say that it was the history of what usually took place when there were any financial relations between England and Ireland He should venture to suggest that the question should be dealt with by the committee which it was to be proposed should consider amendments of the Medical Acts

Sir PHILIP SMYLY pointed out that the Irish Branch Council had no power of increasing its income from registration but he did not believe that the revenue of that Council would diminish very much more On the contrary, he hoped —and he did not think it was a hope without some good ground—that the funds of the Irish Branch Council would increase

Sir DYCE DUCKWORTH thought that the history of the Council during the last 15 years explained the expenditure What he wanted to know was why such a large number of Irish students should go to Scotland to seek a diploma

Sir CHRISTOPHER NIXON The education is cheaper and the examinations are easier to pass

Dr MCVAIL said that that was not so

The recommendation was adopted

Mr BRYANT next moved

That the other portions of the Finance Report be approved and adopted

In answer to Mr HORSLEY Mr BRYANT stated that the Council had not paid the lawyers accounts for the year 1898.

The REGISTRAR explained that the Council was always a year behind in the payment of the accounts of their legal advisers

Mr HORSLEY thought that that fact ought to be borne on the face of the accounts

The motion was agreed to and the report of the Finance Committee, with its several recommendations was passed

The Penal Cases Committee

The PRESIDENT announced that the result of the ballot for the election of the Penal Cases Committee was that the four representatives for England were Mr Bryant, Mr Brudenell Carter, Dr Glover, and Mr Horsley and that the two Scotch representatives were Dr Heron Watson and Dr Bruce As to the Irish representation on the committee Sir William Thomson was distinctly elected, but there was a tie in the voting as respects Dr Lombe Atthill and Sir Christopher Nixon

Dr LOMBE ATTHILL I wish that Sir Christopher Nixon should be the member of this committee.

Sir CHRISTOPHER NIXON I should like that Dr Atthill would undertake the duty

The PRESIDENT As Dr Atthill spoke first, Sir Christopher, I shall add your name to the committee

The committee accordingly is composed as follows for England—Mr Bryant, Mr Carter, Dr Glover and Mr Horsley, for Scotland—Dr Heron Watson and Dr Bruce, for Ireland—Sir William Thomson and Sir Christopher Nixon

Students' Registration Committee

Sir DYCE DUCKWORTH submitted a report from the Students' Registration Committee on exceptional cases which they had considered and dealt with He moved that the report be entered on the minutes

Dr MACALISTER seconded the motion, which was agreed to

Reciprocity of Medical Practice

The Council resumed the consideration of communications from the Privy Council Office in regard to the practice of Italian medical practitioners in this country and the question of reciprocity in regard to which the General Medical Council on May 31st, 1899, resolved —

That it be remitted to Mr Muir Mackenzie to advise the Council as to whether, under Section 17 of the Medical Act of 1886, the privileges to foreign practitioners can be restricted to the recognition of practice by them amongst their fellow-countrymen only who may be resident in this country

On this subject the following opinion has now been received —

The question on which as I understand, my advice is asked is whether under Section 17 of the Medical Act, 1886, the privileges accorded to foreign practitioners under Part 2 of the Medical Act, 1886, can be restricted to the recognition of practice by them amongst their fellow countrymen only who may be resident in this country

The 17th Section of the Medical Act, 1886, provides, as regards a foreign country that Her Majesty may by Order in Council declare that Part 2 of the Act shall be deemed on and after a day to be named in the Order (which in the Act is called the prescribed day ') to apply to a foreign country which in the opinion of Her Majesty affords to the registered medical practitioners of the United Kingdom such privileges of practising in the foreign country as to Her Majesty may seem just.

The effect of the section is that on such an Order being made by Her Majesty Part 2 of the Act becomes applicable to the practitioners of the foreign country

The effect of the application of Part 2 of the Act to the foreign country is that by Section 12 of the Act a person who satisfies the Registrar that he holds a recognised medical diploma of the foreign country and satisfies the other conditions contained in Section 12 is entitled to be registered in the list of foreign practitioners in the Medical Register

The effect of Sections 6 and 14 of the Medical Act of 1886 is that every person who becomes registered as a foreign practitioner becomes entitled to practise medicine, surgery, and midwifery in the United Kingdom and British Dominions.

There is no express provision in Section 17 or in any other provision of the Medical Act, 1886, which empowers Her Majesty by the Order in Council which applies the Act to a foreign State, to limit the right of the foreign practitioners who by virtue of the Order in Council and the Act become entitled to be registered.

In the absence of any express power to impose such a restriction as is suggested by the question put to me my opinion is that no such restriction could be imposed by an Order in Council made under Section 17

If Her Majesty is advised that a foreign country affords to the registered practitioners of the United Kingdom such privileges of practice as Her Majesty thinks just, Her Majesty can make an Order applying Part 2 of the Act to that foreign country but upon such an Order being made the practitioners of the foreign country who satisfy the requirements of the Act will be entitled to the full privileges which the Act confers.

My opinion, therefore to the question submitted to me is that the privileges to foreign practitioners cannot be restricted in the manner indicated in the question.

M. MUIR MACKENZIE.

4, Temple-gardens, E C June 7th 1899

As Mr Muir Mackenzie was not in attendance Dr MCVAIL moved that the case should not go on He did not think it was right to proceed while Mr Muir Mackenzie was absent It was quite unfair to Mr Muir Mackenzie to go into the case in his absence as it was also unfair to any public interest involved

Dr HECTOR CAMERON agreed

Dr GLOVER refused to adjourn consideration of the case on the ground put forward If Mr Mackenzie was not present that was his misfortune, not his fault

On a division five members voted for the motion proposed by Dr MCVAIL and 11 against it

The motion was rejected and the opinion of Mr Muir Mackenzie was entered on the minutes

The Case of the late Mr H K Hunter

Mr HORSLEY asked leave to draw attention to the proceedings taken in the name of the Council against the late Mr H K Hunter

A narrative, extending to 43 pages of 8vo print drawn up by direction of the President for the information of members of the Council, was circulated

The PRESIDENT moved that this narrative be received and entered on the minutes and that no other name but that of Mr Hunter be mentioned therein

This motion was carried

The PRESIDENT then said that his wish had been to give a correct narrative of the case and that perhaps accounted for the somewhat unusual dimensions to which the print had gone

Mr HORSLEY said that his object in drawing attention to this case was to exculpate the General Medical Council from the charges which had been made against it outside the four walls of their chamber to the effect that they had prosecuted a registered medical practitioner for calling himself a physician He went on to say that the Council had not, as they viewed the case, prosecuted a registered medical practitioner but a man whom they were given to understand was an unregistered medical practitioner, using a bogus American M D degree

Mr BROWN believed that the members of the General Medical Council were not aware of the full facts of the case when the proceedings were taken against Mr Hunter He certainly was of opinion that it should be recorded that the prosecution of Mr Hunter was not sanctioned by the Council in its capacity of a Council

Dr GLOVER, as a member of the Penal Cases Committee as well as a member of the General Medical Council, wished to express his belief that if this case had not been made a test case more assistance would have been given to Mrs. Hunter and he hoped that the fund which was being raised for her would be largely augmented

After some discussion Dr GLOVER said that the case had been proceeded with in a friendly spirit and without any animus It was a test case and not a personal one

The PRESIDENT defended Mr Muir Mackenzie's action

The subject dropped

Reciprocity of Medical Practice

On Dr MACALISTER rising to move the ninth order on the paper,

Dr MCVAIL said What about the eighth order? (Mr Muir Mackenzie's opinion on reciprocity with the practitioners of Italy)

Dr MACALISTER said that that opinion had already been entered on the minutes and he now proposed that the Executive Committee should consider it along with the memorandum on reciprocity

Mr BRYANT seconded

Dr MCVAIL said that he was not satisfied with that explanation of the subject Now that they had got Mr Muir Mackenzie's opinion he did not see that they could go on either to a discussion or division on the subject.

Dr MACALISTER said it was impossible for the United States of America to enter into reciprocity and as a matter of fact it was impossible for Canada to enter into a reciprocity

The Council adjourned

FRIDAY, JUNE 9TH

The Council held its final sitting to-day when there was a very much reduced attendance of members Sir WILLIAM TURNER occupied the chair

Reciprocity of Medical Practice

The Council proceeded with the consideration of the following motion by Dr MACALISTER, seconded by Mr BRYANT —

That the opinion of Mr Muir Mackenzie in regard to the following resolution, adopted by the General Council on June 8th 1899—

That it be remitted to Mr Muir Mackenzie to advise the Council as to whether under Section 17 of the Medical Act of 1896, the privileges to foreign practitioners can be restricted to the recognition of practice by them amongst their fellow countrymen only who may be resident in this country"—be referred to the Executive Committee for consideration in connexion with the memorandum on reciprocity

Dr MCVAIL asked the President if he had any information as to whether the Privy Council had taken any action in consequence of the letter sent to the Privy Council by the Executive Committee regarding recognition of Italian medical graduates in this country

The PRESIDENT replied that the information he had was that the Privy Council had as yet not taken any action Obviously the Privy Council had waited until the meeting of the Council

Dr MCVAIL then moved a long motion, the effect of which was that it be remitted to the Executive Committee to represent to the Privy Council that in reply to the question put by the Council Mr Muir Mackenzie gave the

answer set forth in the minutes and that the Executive Committee be requested in a covering letter to the Privy Council to indicate the difficulties which surround the granting of recognition to medical graduates of foreign countries over whose curricula or study and professional examinations the General Medical Council can exercise no supervision, and that in the event of any further official communications bearing on the subject being received the Executive Committee be requested to consider whether the principle of a limited recognition of practice already established by Section 6 of the Act of 1859 might not be extended by a short enactment Dr McVail explained that the extension in his mind was that of allowing Italian practitioners to attend Italians in this country What had been asked by British practitioners had been the privilege of attending British residents in Italy

Mr TOMES seconded the motion

Mr HORSLEY suggested that the motion should stop at the word "supervision" because the President of the Privy Council had told them that he would not contemplate a short enactment of this kind, but only a general amendment covering the whole subject

Dr McVAIL said he was quite prepared to accept this suggestion

Dr GLOVER thought the Council should indicate to the Privy Council how far they were prepared to go

Dr HECTOR CAMERON pointed out that British medical men practising in Italy had a large number of Americans among their patients and that probably they would not be content with recognition of practice among British subjects—they would probably wish it extended to English speaking people.

Dr McVAIL said he was strongly impressed with the idea that unless they had proper inspection of the whole machinery of education and examination they should not give recognition in this country Of course, if the Privy Council chose to recognise foreign or colonial diplomas without the advice of the Council the responsibility would lie with the Privy Council

Dr MACALISTER said he was anxious that the Privy Council should not think the Council were inconsistent and as a matter of fact the Council were recognising these diplomas—they were doing it every day by putting people on the Colonial Register

After some further discussion the motion with all the words after "supervision" deleted was agreed to

The Midwives Question

The REGISTRAR (Mr Allen) read the following communication from the Privy Council Office in answer to a communication from the President of the General Medical Council forwarding a draft report adopted by the Midwives Bill Conference Committee —

The Clerk of the Council,
Privy Council Office London, S.W.,
June 6th, 1899.

Sir—Adverting to your letter of April 10th last on the subject of the Midwives Bill now before Parliament I am directed by the Lord President to inform you that in the result of further communications with the promoters of the Bill they are willing to meet the views expressed in the first paragraph of the report of the committee of the General Medical Council by the addition to Clause 3 (3) of the words "unless she is registered under the Medical Acts to attend cases of abnormality or disease in connexion with parturition."

His Grace is advised that, as a matter of drafting, this form of amendment is preferable to the change in the definition of midwife which found favour with your committee.

The definition in Clause 2 of the Bill is merely a description, and would not appear to be an inaccurate one whereas the proper way in which to negative any suggestion that the Bill confers on women not registered under the Medical Acts a statutory right to attend cases of abnormality or disease in connexion with parturition is by making an addition to Clause 3 and it would appear that the words suggested by the promoters of the Bill are sufficient to prevent any inference that the Bill would in effect with the principle or policy of the Medical Acts.

I am to add that this concession seems sufficient to meet the necessities of the case and that in respect to almost all the other points contained in your committee's report the promoters of the Bill are in substantial agreement with the suggestions that have been made for its amendment, but the Lord President did not see his way to press upon their acceptance the proposals of the committee relative to the constitution of the Midwives Board.

I am, Sir your obedient servant,
A. W. FITZROY

Sir William Turner, P.R.S.
President of the General Medical Council.

Sir RICHARD THORNE said that the committee were strongly impressed that the licensed midwife should be confined to natural labours. That, they contended should appear in the definition of the term "midwife" in the Bill, but the Privy Council Office have had it suggested to them that it would be very much better to make a definite disability on the part of the midwife to attend any case or abnormal labour or any case of disease in connexion with parturition and this letter said "His Grace is advised that, as a matter of drafting, this form of amendment is preferable to the change in the definition of midwife which found favour with your committee" He showed this letter to every member of the committee and they agreed that it would be better to accept the decision of the Privy Council in the matter, because, after all, it was a matter of the drafting of the Bill and the Privy Council had access to the Government draftsman, and the President agreed that they should accept the opinion of the Privy Council as to the best way of attaining this end This was to have come forward yesterday, but owing to the large amount of business to be performed the President last night drafted a letter expressing the view of the committee, which was to accept the opinion of the Privy Council in the matter, and that letter had actually been sent to the Privy Council Office In the name of the Council the President had accepted the judgment of the Privy Council Just one alteration had been suggested It was pointed out that the term "abnormality" often carried a technical sense and it was suggested that the words should run that midwives should be prohibited from "attending cases of abnormal labour"

The terms of the President's letter were read to the Council

Mr BROWN said he desired to take the opportunity of saying that he did not approve of any legislation of this kind for midwives

Dental Penal Cases.

The recommendation from the Dental Committee as to adopting a new Standing Order for regulating procedure in dental penal cases was brought up again and adopted by the Council

Proposed Amendment of the Medical Acts

Dr GLOVER moved

That a committee of the General Medical Council be appointed to consider necessary amendments of the Medical Acts.

He said that among subjects calling for attention were the uncertainty of restoration to the Register, the inequality of the powers of the bodies in the matter of dealing with their graduates and licentiates, the amendment of Section 40 of the Act, the inspection of the examinations for the higher qualifications, the question of reciprocity (for which, he said, some solution must be found, because at this time of day it was impossible to deny reciprocity between nations in respect of equally educated men), and the question of the constitution of the Council itself He could not help thinking that they had had sufficiently long relations with the present Government to have borne in upon them the conviction that they were a very moderate and reasonable set of men and that any proposals they might make to them were entitled to their best and most earnest consideration

Sir WILLIAM THOMSON in the absence of Dr Bruce, seconded the motion

Sir CHRISTOPHER NIXON said he cordially supported the motion For his part he would like to see the law declare that no one should be allowed to practise unless he had been registered. Another point he would like to see attention given to was the financial position of the Council, and another was the right to use medical titles.

Sir JOHN BATTY TUKE said that from the point of view of the Education Committee it would be desirable to have an amendment of the law with regard to the registration of students It was specially laid down in the Act that the Council should obtain information as to the ages at which certain courses of study and examination took place and the Council had no machinery for the purpose except what they had constructed for themselves It seemed to him that they should be able to carry out the behests of the Act as it stood at present by the establishing of a right to register students and to determine the conditions under which they were to be registered

The PRESIDENT said he would like to call the attention of the Council to the interim reports which he had issued as to the disciplinary powers and his efforts to get the various medical authorities into line and to agree to an Act which would carry out certain very important amendments and would give powers to the bodies to do what many of them could not do at present—namely, cancel or revoke the diplomas they had conferred Although in the first stage of the negotiations various objections had been raised, he hoped

that in the second stage the bodies would all come into line Another point in this connexion was the disposition of the penalties paid in the metropolitan police districts If he could get these agreed to and carried undoubtedly important reforms would be instituted, but from what had fallen from various speakers in this debate it seemed to him that the intention was to get, not a reform of the existing Act, but a new Medical Act, altogether Of course, if the Council were of opinion that the report of such a committee as was proposed would enable them to get that he made no objection but he had grave doubts whether it would enable them He ventured to make the suggestion that they should not be precipitate in this matter let them wait until next November and see what answers the bodies gave to him upon the clauses which would be sent to them He felt sure that a little delay would not be disadvantageous

Dr MACALISTER said there was a consideration against this roving commission that the Council were an administrative and judicial body, and if they began from within to propose practically the reconstruction of the Act under which their powers were given they must immensely weaken what they did under the existing law, and the moral effect of their action would be vastly weakened He thought that amendments of the Medical Acts would come far better from outside bodies and what they proposed would surely come before the Council for their consideration and approval If the Council initiated legislation in a general and wholesale way he was sure that the Privy Council would adopt a different attitude from that which they had, so to speak, succeeded in winning from them and he was afraid it would undermine their power

Mr BROWN said that his view was that from no quarter could legislative proposals come more appropriately than from the Council which from long experience of their working knew well the shortcomings of the existing Medical Acts, and he would point out to the President that unless they were ready with a Bill in November next they could not expect an Act in 1900

The PRESIDENT You may add a good many years to that, Mr Brown

Mr CARTER said that the proper people to introduce amendments to the Medical Acts were members of the legislature and they had the advantage of having in the House of Commons members of their own profession—men of great attainments, accustomed to deal with public affairs, and men of sound sense and discretion If members of the profession were anxious to reform the Medical Acts their first step should be to approach these gentlemen and to endeavour to enlist their assistance in the undertaking Any Bill that these gentlemen might be induced to promote or back would unquestionably be referred to the Council and he had no doubt that the supporters of the Bill would value the advice they might be able to give them, but for the Council to engage in a perfectly indefinite inquiry as to what some people thought necessary and other people might think exceedingly unnecessary would be in his opinion a wasting of time

Dr GLOVER, replying on the debate, pointed out that the hands of the Council would not be tied by anything the proposed committee might report, because it would always be open to the Council to reject the report or any part of it to which they took exception It was a most astounding doctrine which Mr Carter had laid down that the persons to bring about, to carry through, and to ask for the amendment of the Medical Acts were the three or four medical men who happened to be members of the House of Commons As regards one or two of these gentlemen he had heard it stated in the House of Commons that they had sunk the doctor in the politician, but surely Mr Carter did not seriously mean that they were to depend for important legislation of this kind upon certain medical men who chanced to be members of the House of Commons

A vote was then taken, when eight voted for the motion, 10 voted against it, three members did not vote, and nine members were absent The motion was accordingly lost

Dr MCVAIL said that the result of the voting showed how wrong it was to take a motion of this kind upon the last day of a long session It ought to have been taken early in the session and a considerable part of a day given to its discussion

The Council and the Profession

Mr HORSLEY moved —

That all memorials addressed to the General Medical Council be received and laid upon the table

He thought that if the Council's procedure was in accordance with what he proposed nobody would have any cause of complaint

Dr MACALISTER and the PRESIDENT pointed out that any memorials sent to the General Medical Council required in the first instance to be inspected by the Business Committee or the Executive Committee and that if they were of a suitable character they might then proceed for the consideration of the Council

Some discussion ensued and it was agreed —

That, subject to Standing Order XVI all petitions addressed to the General Medical Council immediately before or during the session of the Council be laid upon the table.

The Council's Proceedings

Mr HORSLEY moved —

That a shorthand report should be made of all sittings of the Council and Executive Committee.

He thought that they would be only acting in conformity with other public bodies if they had such reports as he wanted of their proceedings

Mr BROWN seconded the motion

On a division the motion was rejected

The London Apothecaries' Society

On the motion of Mr CARTER, seconded by Mr BRYANT, the Council resolved —

That Mr Charles Stonham, F R C S., surgeon to and lecturer at the Westminster Hospital, be appointed an Assistant Examiner in Surgery to the Society of Apothecaries for a period of five years, in the room of Mr. Bernard Pitts, retiring by rotation

The Dublin Apothecaries' Hall

As the appointment of assistant examiners in surgery at the Apothecaries' Hall, Dublin, expired on May 31st it was agreed that these assistant examiners should be reappointed

Illegal Certificates in Midwifery

The Council proceeded to consider the following notices of business (*a*) Adjourned consideration of the report by the Executive Committee (received and entered in the minutes of May 31st) on memorials on the subject of illegal certificates of proficiency in departments of medicine surgery or midwifery (*b*) To receive a memorial, dated March 30th, signed by 550 persons, on the subject of the alleged "improper conduct" of registered practitioners by participation in the issue to persons not medically registered of diplomas or certificates testifying or implying, or which may be used to testify or imply proficiency in departments of medicine, surgery, or midwifery

Mr BROWN moved that the whole of the memorials be referred to the Special Committee on the subject appointed earlier in the session He wished to impress upon the Council that the issues involved in these memorials were very important and in his view the Council could not give them at the end of their session that adequate discussion which was necessary The memorialists were men who held the higher positions in the profession and he thought the Council should look upon the memorials, or petitions if they might be called by the latter name, as so important that they should not be thrown aside as of no account

Mr HORSLEY was of the opinion that the Council was not in a position at that moment to fully consider the matter and he thought that it would be very much better if they postponed the whole business to the November session

Dr MCVAIL said it seemed to him that the Executive Committee in the report presented by them to the Council on May 31st had gone as far as it was possible to go, and he could not see that they could get anything more from a special committee

Dr MACALISTER considered that it would be most unwise to proceed further than the Executive Committee had gone in their finding

Mr BRUDENELL CARTER wished to point out to the Council that there was nothing new in the matter of advertising by spectacle-makers The only difference was that those who advertised now professed to be "certified" or "certificated" This whole business seemed to him to be utterly outside the province of the Council and he was not disposed to waste more time in considering whether spectacle makers knew or did not know the difference between a concave and a convex lens

On the motion of Mr BRYANT, seconded by Dr HERBERT WATSON, the Council adopted the following resolution submitted by the Executive Committee —

That, as regards the issue of certificates in midwifery referred to in the memorials, the Council is of opinion that as a Midwives Bill is now

fore Parliament it should at present refrain from taking any action
s regards the certificates granted to spectacle-makers the Council
exercises no jurisdiction over such opticians, but will be prepared to
nsider any properly substantiated charge of improper conduct made
gainst a registered medical practitioner with reference to this subject

Mr BROWN'S amendment was rejected by 12 votes to five, ine members being absent

The Council Chamber

Dr MCVAIL, seconded by Dr HERON WATSON, moved —

That Mr Bryant, Mr Teale, and Sir Richard Thorne be appointed a committee with full powers to carry out, before the next session of the Council, whatever improvements they may deem to be practicable and desirable for the better ventilation of the Council room, and if possible to improve the press accommodation.

He (Dr McVail) pointed out that the accommodation which the Council provided for the press was very poor

The motion was agreed to

The Midwives Bill Committee

On the motion of Dr MACALISTER (for Sir RICHARD THORNE), seconded by Mr BRUDENELL CARTER, it was agreed

That the committee appointed on Nov 29th 1893, for the purpose of watching legislation on the subject of midwives during the present session of Parliament be re-appointed as the Midwives Bill Committee and be instructed to watch any further legislative action that may be proposed in the matter

Medical Aid Associations

On the motion of Dr GLOVER, seconded by Mr BROWN, the following resolutions were agreed to —

1 That copies of the resolution passed by the Council on June 6th on the subject of Medical Aid Associations relative to the formation of a board of conciliation be forwarded by the Registrar to those persons and bodies who have memorialised the Council on the matter and likewise to the representatives of the friendly societies with whom the committee have had conference.

2 That the Committee on Medical Aid Associations be reappointed.

A notice of amendment to these resolutions of which notice had been given by Dr McVail, who was to be seconded by Sir John Batty Tuke, was postponed until next November The notice was in the following terms —

That the Council shall issue to all registered medical practitioners the following notice That the Council will regard as infamous conduct in a professional respect the association of registered practitioners with medical aid associations which systematically canvass and advertise for the purpose of procuring patients to such associations and practitioners."

Companies Act Amendment Bill

The Council received the following communication from the Lord Chancellor's Office in regard to the representation that the President was requested to make to the Lord Chancellor on May 31st in regard to the Companies Act Amendment Bill —

House of Lords, S.W June 5th, 1899

SIR —I am directed by the Lord Chancellor to acknowledge the receipt of your letter of the 1st inst. enclosing a report of the Companies Act Amendment Bill Committee and referring to the Companies (Medical Profession) Bill, 1899.

I am, Sir your obedient servant
K. MUIR MACKENZIE.

Sir William Turner, M.B
President of the General Medical Council.

Mr TOMES explained that in order to give effect to the Council's wishes on this subject it had been considered unnecessary to proceed with a special Bill because in the general Bill affecting companies a clause had been inserted to carry out practically what the Council desired

The PRESIDENT asked Mr Tomes if the clause in question included the term "medical practitioner"

Mr TOMES No, that is to be seen to I would ask the reappointment of the committee

Mr TICHBORNE seconded.

It was agreed to continue the committee

Dental Education

At the instance of the Dental Education and Examination Committee a report was presented relative to an Act passed in the colony of Victoria in December last to amend the law relating to dentists The report, which was signed on behalf of the committee by Mr BRYANT, the chairman, was as follows —

The Act is one of some interest. It repeals some of the provisions of the Medical Act Victoria, 1890 Part II and is intended to remedy some of the difficulties which had arisen in the working of that Act and especially to confer the power upon the Dental Board of framing a curriculum and prescribing its fulfilment as a condition precedent to admission to examination (This had previously been done, but it had been declared by the Attorney General of the colony to have been ultra vires) The practical effect of this enactment is that no person who had commenced his professional education prior to Dec. 20th 1888, will be subject to these curriculum requirements, so that it will be four years before any curriculum candidates can be examined. Other features of interest in the Act are that it empowers the Dental Board to accept certificates of examination in certain subjects by the University of Melbourne and by other specified affiliated and recognised bodies in lieu of examinations conducted by the board itself

It recognises registration in the United Kingdom as conferring a right to entry upon the Victorian Colonial Register and accords a more qualified recognition to other foreign degrees for the same purpose

It deals with the company question by prescribing that no company unless wholly composed of registered dentists shall make use of titles or expressions implying the possession of a qualification to practise, or that practice is actually carried on It permits executors or trustees to continue the practice of a deceased dentist for two months but no longer without the express permission of the Dental Board and only if the practice is *bond fide* and carried on by a registered dentist

It contains an apprentice clause but apprenticeship prior to the passing of the Act merely confers a right to come up for examination, and does not *ipso facto* admit to the Register

Hence the Act contains clauses which have evidently been drafted with full cognisance of certain of the difficulties which have arisen in the administration of our own Acts.

On the motion of Dr MACALISTER this report was received and entered on the minutes

Prevention of Personation

An elaborate document, which was described as a "draft report" from the Prevention of Personation Committee, was, according to the programme, to be presented to the Council

Mr HORSLEY agreed at the suggestion of the Council, but at the same time in accordance with a notice which he had previously placed on the paper, that the consideration of the said draft report should be postponed till the November session He also wished the Council to say that in the interval no name should be restored to either the Medical or the Dentists' Register except by direction of the Council or of the Executive Committee under Section 14

The PRESIDENT thought that they had not the power to do that

Mr HORSLEY'S motion for the postponement of the report was agreed to

Other Dental Business

The Council received the following report from the Executive Committee on dental business transacted by it since the last session of the Council —

The Executive Committee report that the following matters on dental business have been considered by them since the last session of the Council —

(*a*) They approved of the restoration of the names of the undermentioned persons to the Dentists Registrar from which they had been erased in conformity with the provisions of Section 12 of the Dentists Act (1878) Francis Boulger and William Julian.

(*b*) They received from the treasurers statements duly audited of the receipts and expenditure of the Dental Fund of the General Medical Council for the year ending Dec. 31st, 1893, and directed that a summary thereof should be published in the Medical and Dentists' Registers for 1899 and that it should be laid before both Houses of Parliament.

(*c*) They considered the form of the supplementary notice to be issued to dentists in regard to the subject of the administration of anæsthetics and approved of one which had been drafted by Mr Muir-Mackenzie as follows —

NOTICE.

Any registered medical practitioner who knowingly and wilfully assists a person who is not registered as a dentist in performing any operation in dental surgery either by administering anæsthetics or otherwise will be liable on proof of the facts, to be dealt with by the General Medical Council as having been guilty of infamous conduct in a professional respect.

(*d*) They accepted the resignation of Sir Henry Pitman the sole surviving trustee to the Dental Fund, thanked him for his services, and appointed in his place Dr Church and Mr Tomes trustees, who kindly consented to accept the appointment.

(*e*) They received a letter from the Royal College of Surgeons of England in regard to the course of study and examination for licences in dental surgery

(*f*) They received a communication from the Dental Board of Victoria in regard to the registration of Mr E. H C Bailey in the Colonial List of the Dentists Register and resolved —

That Mr E H C Bailey and Mr F W Bailey be asked to produce the certificates required by the regulations under which they commenced their studies in proof of their having fulfilled the regulations under which they commenced."

(*g*) They considered and rejected an application for registration under Section 37 of the Dentists Act, 1878.

(*h*) They received from the Colonial Office a copy of an Act of the Legislature of Victoria to amend the law relating to dentists and resolved that it be referred to the Dental Education and Examination Committee

On the motion of Dr MACALISTER this report was entered on the minutes, and on the suggestion of Mr TOMES it was agreed that the notice in regard to the administration of anæsthetics should be appended to any notice to dentists sent out by the Council In reply to Sir DYCE DUCKWORTH the PRESIDENT said that Dr Church's resignation of membership of the Council would not interfere with his trusteeship to the Dental Fund

Education in Wales

On the motion of Sir JOHN BATTY TUKE the Council agreed

to recognise the senior examinations of the Welsh Intermediate Education Board and also the degree of science of the University of Wales

Appointment of Committees

The several committees of the Council were then appointed, the chief alterations being the replacing of Dr Church by Dr Payne on the Education Committee and the substitution of the name of Dr Pye Smith for that of Dr Church on the Public Health Committee

Dr Leech continues chairman of the Pharmacopœia Committee, Mr Bryant remains chairman of the Finance Committee, while the President will be *ex officio* chairman of the Dental Committee.

The Examination Committee will consist of the following members For England Sir Dyce Duckworth (chairman), Mr Bryant, and Mr Teale, for Scotland Dr Heron Watson, Dr Pettigrew, and Dr McVail, and for Ireland Dr Little, Sir William Thomson, and Sir Philip C Smyly

The Education Committee is composed of Dr MacAlister, Dr Glover, and Dr Payne for England, Sir John Batty Tuke (chairman), Sir William Gairdner, and Dr Reid for Scotland, and Dr Bennett, Sir Christopher Nixon, and Sir William Thomson for Ireland

The members of the Public Health Committee are—for England Sir Richard Thorne (chairman), Mr Teale, and Dr Pye Smith, for Scotland Dr Hector Cameron, Dr McVail, and Dr Bruce, and for Ireland Dr Bennett, Sir Philip C Smyly, and Mr Tichborne

The Students' Registration Committee, with Sir Dyce Duckworth as Chairman, was also continued

Vote of Thanks

The proceeding of the Council terminated soon after five o'clock The minutes of the sitting were read and confirmed Just before separating, however, Dr GLOVER thought the Council ought to accord to the President a very cordial vote of thanks for the patience with which he had presided during this very prolonged session Sir CHRISTOPHER NIXON supported this suggestion, which was received with applause by the members present

The Council rose till November next, the session having lasted for 10 working days, being the longest since the year 1885, when very important business detained Sir Richard Quain and his colleagues of that year for no fewer than 11 days

Medical News.

VICTORIA UNIVERSITY—The following degrees have been awarded —

Degree of Doctor of Science.—A W Crossley Edward Haworth, and Albert Griffiths, Owens College.

Degree of Doctor of Medicine.—* H E Annett, University College and † O A. Davies, * C R Marshall † T A. Rothwell, * ster Thompson, and J D Windle Owens College

* Awarded gold medal. † Awarded mark of commendation.

THE LATE DR A B CHEVES—Some friends have placed a beautiful stained glass window in the side chapel of the parish church of Millbrook, Cornwall, as a memorial to the late Dr Alexander Bruce Cheves The window consists of three lights and contains the following inscription "To the Glory of God and in Memory of Alexander Bruce Cheves, M D, 1899"

MANY of our readers will be aware of the recent and regretted death of Mr James Arnold, senior partner in the well known firm of surgical instrument makers, Messrs Arnold and Sons Owing to an advertisement in our columns an impression has been given that the business of the firm would be for sale We have been asked by the two remaining partners in the firm—Messrs J E and E R Arnold, sons of the deceased—to state that they will continue to conduct the business as heretofore

FREEMASONRY—*Rahere Lodge, No 2546*—The installation meeting of the Rahere Lodge was held in the great hall at St Bartholomew's Hospital, E C, on Tuesday, June 13th, in the presence of a large and brilliant assembly Dr G N O Slater, Dr Tunnicliffe, and Dr H W C Austen were initiated into freemasonry, and W Bro Burns, the retiring master then installed Bro Reece as his successor Bro Reece appointed Bros Gripper, Abraham, and Godson to the principal offices in the Lodge The report of the audit committee was received and adopted and showed that the Lodge was in a highly prosperous condition financially The brethren and their guests to the number of 80 afterwards dined together at the Restaurant Frascati

VACCINATION GRANT—Mr Edward Knowles, M D Aberd, of Higher Tranmere, Birkenhead, has been awarded the Government grant for efficient vaccination

BROCKWELL HALL.—Messrs Burroughs, Wellcome, and Co have acquired Brockwell Hall, Herne hill, and an extensive paddock adjoining it The fine old mansion is now undergoing reconstruction to adapt it for use as physiological research laboratories

THE ROYAL INSTITUTE OF PUBLIC HEALTH—The annual dinner of this institution was held on June 7th at the Hotel Cecil, Dr W R Smith, President, being in the chair Among those present were the Archbishop of Canterbury, Lord Lister, Sir William Turner, Sir Michael Foster, Sir William Broadbent, Sir James Crichton Browne, and Sir Dyce Duckworth The chairman proposed the health of Lord Lister to whom the Institute had awarded the Harben Medal for the year Lord Lister in an appropriate reply referred to the enormous development in recent years of the study of bacteriology and the effect of this study upon preventive medicine The Archbishop of Canterbury proposed the toast of "Prosperity to the Institute," to which Dr Smith responded in suitable terms

NATIONAL SOCIETY FOR EMPLOYMENT OF EPILEPTICS—The annual meeting of the governors of this society was held on June 12th at 12, Buckingham street, Strand, the chair being taken by Mr E Montefiore Micholls The chairman, in his introductory speech, referred to the forthcoming opening by the Duke and Duchess of York of four new homes at the colony established by the society at Chalfont Two of these homes were intended for children, and the committee looked to this extension of the work with the most confident anticipations of good results It was hoped that ere long the recommendations made by the recent committee of the Education Department would be carried into effect by legislation so as to enable school boards throughout the country to send epileptic children to such homes The work which the society had in hand was of national importance, it was too vast to be wholly accomplished by the unaided resources of voluntary charity, and it could best be performed by a system of coöperation between school boards and other public authorities on the one hand and voluntary agencies such as that society on the other This view had been fully recognised by the departmental committee to which he had referred Another extension about to be made in the society's work would take the form of a home for convalescent and other temporary cases, an offer of £2500 for this purpose having been made by a gentleman whose name he was not at liberty to divulge Epileptics were rigorously excluded from the ordinary convalescent homes, and the need for a special home to receive such cases had long been felt The progress of the society during its brief existence was probably almost without a parallel amongst charitable institutions Its success was to be attributed in the first place to the merits of the cause and to the full though tardy awakening of the public conscience to a feeling that the former neglect of epileptics must no longer be permitted To the personal interest taken in the movement by the Duke of York as president the society owed much and much also to the heartiness and unanimity with which it had been supported by the press The annual reports of the executive committee and the honorary medical staff were then received and adopted The first-named report showed that notwithstanding the growth of the colony its accommodation was still quite incommensurate with the need The urgent necessity for further extension was pointed out and the committee urged very forcibly that such extension could be made without causing any difficulty as to the future maintenance of the institution It appeared from the report that owing to the press of applications candidates had to wait on the average two years for admission, and during that time the disease naturally became confirmed and aggravated In spite of this obstacle the progress made by the colonists, as shown by the report of the honorary medical staff, was regarded as equalling the most sanguine expectations

Parliamentary Intelligence.

HOUSE OF COMMONS

THURSDAY, JUNE 8TH.

The Pasteur Institute in India

SIR WILLIAM WEDDERBURN asked the Secretary of State for India whether his attention had been drawn to the proceedings of the Central Committee of the Pasteur Institute, held on April 15th last at the office of the Director-General Indian Medical Service at Simla (the Director-General himself in the chair), when it was proposed to ask the Government to make a grant for a Pasteur Institute and to place it under a Government medical officer whether this committee had been formed with the sanction of Government and whether it was proposed to grant them the assistance asked for—Lord GEORGE HAMILTON replied: I have seen a newspaper report of the meeting of the Pasteur Institute to which the question refers. The Government of India are I believe, aware of the formation and proceedings of the committee, but I ascertained some weeks ago that they had not decided on their course of action. They hoped, however to deal with the question during the present summer

The Adulteration of Tea.

Sir FORTESCUE FLANNERY asked the Chancellor of the Exchequer if his attention had been called to a statement in the press that a quarter of the caper teas and half of the dust teas now imported should be condemned under the Food and Drugs Act of 1875 by reason of their containing 20 per cent. of earthy matter and sand; whether he would explain the nature of the precautions taken by the Customs Department in London for the detection of such adulteration and whether the number of samples analysed could be increased with advantage and whether having regard to the fact that the descriptions of tea above named were for the most part consumed by the humbler classes least able to protect themselves against adulteration he would increase the staff of inspectors especially allocated to the duties of sampling and analysis of caper and dust teas.—The CHANCELLOR of the EXCHEQUER replied: My attention has been called to this matter The Board of Customs have in view of representations made to them by certain firms and of statements in the press, ordered a full inquiry to be made. It is not easy within the limits of an answer to a question to explain the precautions taken by the Board for the detection of the adulteration of tea but I shall be happy if the hon Member wishes it to supply him with particulars. The Board of Customs as at present advised do not consider that there is any need for altering the existing regulations, but if as a result of the investigation now in progress it should appear advisable to make such alterations or to increase the number of tea inspectors the necessary steps will be taken at once. Meantime a circular has been issued to the tea inspectors directing them to administer the existing regulations with special care.

An Ambulance for the Houses of Parliament

Two questions were addressed to the First Commissioner of Works with regard to the desirability of providing an ambulance within the precincts of the Houses of Parliament for use in case of accident or sudden illness.—Mr AKERS DOUGLAS, in reply said that the matter appeared to him to be outside his jurisdiction and one for the consideration of the authorities of the Houses of Parliament.

Undersized Fish.

At this sitting of the House Mr RITCHIE, President of the Board of Trade introduced a Bill designed to prevent the destruction of undersized fish. It was framed, he said on the report of the Select Committee on Sea Fisheries which sat in 1893 and was a somewhat simpler Bill than that which passed the House of Lords in 1897, and he hoped it would become law before the end of the session

The Services of the Medical Officers in the Soudan Campaign

During the discussion of the vote of thanks to the officers and men engaged in the recent Soudan campaign Dr FARQUHARSON called attention to the fact that while other officers were mentioned by name in the resolution no medical officers were so distinguished. He said that he considered it his duty to the profession to which he belonged to call attention to this important omission He thought that at least the name of Surgeon-General Taylor ought to have been mentioned whose services had called forth the admiration of his chief The old distinction between combatants and non-combatants was now practically abolished Medical officers accompanying an army were as much exposed to danger as the actual combatants, and in this war these officers conducted their work with skill, bravery, and success under a variety of difficult conditions, and he was greatly disappointed that the name of not one of them appeared in the *Gazette*.—Mr BALFOUR, replying to Dr Farquharson, said: The hon. Member has reproached us for not having included in the list of those who are thanked by name some member of that great and distinguished profession to which he belongs. I can assure him that this omission does not indicate on our part any disposition to underrate the eminent services rendered in war as well as in peace by the medical profession But the hon. gentleman will feel with me that in these lists of names you must have some principle, you must draw a line in some place, and it is inevitable that beyond that line there will be names of men whose special services we should be glad to recognise On that principle one name that I personally should like to see in the list is that of Lieutenant Girouard who did such distinguished service in organising the railway But we have gone on the principle that you should not go below the rank of general of brigade, or some rank equivalent to that We have included generals of divisions all generals of brigades, naval officers commanding and commanding officers of artillery who practically do rank as generals of brigade, and there we have stopped It would be impossible to add to the list without making it inconveniently and impossibly lengthy We have proceeded as near as we can in letter and spirit according to precedent, and while I recognise the value of the services of many departmental officers without whose assistance neither this nor any expedition could have been successfully conducted I do not think it can be said we convey any slight upon a great profession or make an omission which we ought to have avoided by not specially including these officers.

FRIDAY, JUNE 9TH.

Health of the Troops in Natal

Mr BUCHANAN asked the Under Secretary of State for War whether the British troops had been sent back from the Mooi river to Ladysmith and what steps had been taken to improve the water supply and sanitary condition of the accommodation at Ladysmith—Mr GEORGE WYNDHAM replied: These troops had been under canvas at an elevation of some 5000 feet during the hot weather they were moved back into huts at Ladysmith on the approach of the cold weather when enteric fever is not prevalent £53 000 have been spent on improving the accommodation at Ladysmith and the general officer commanding had been instructed to postpone other services in order to apply the largest possible sum to sanitary requirements at that station.

MONDAY, JUNE 12TH.

The Mistakes of Dispensers

Major RASCH asked the Vice-President of the Council whether any provision had been made by which accidents resulting from mistakes made by unqualified dispensers in doctors surgeries were brought to the notice of the Privy Council and if so whose duty it was to report such cases, and was the Government in a position to state the number of such cases which had occurred during the past two years.—Sir JOHN COLOMB: The answer to this is in the negative. The General Medical Council are reported to have appointed a committee to consider the representations addressed to them by the Privy Council on the subject

WEDNESDAY, JUNE 14TH.

Midwives Bill.

This Bill was down for second reading to-day but was not reached.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o clock on the Thursday morning of each week, for publication in the next number*

BARKLEY Jas L.R.C.P L.R.C.S Edin has been appointed Senior House Surgeon to the Belfast Royal Victoria Hospital

BROADLEY, J M B. Lond has been appointed House Surgeon to the General Infirmary Leeds.

BROUGHTON H T M.R.C.S has been re-appointed Honorary Surgeon to the Dewsbury and District Infirmary

BUCK A. H, F.R.C.S Edin. M.R.C.S L.R.C.P Lond. has been appointed Assistant Surgeon to the Sussex County Hospital Brighton

DANIEL, P L. F.R.C.S has been appointed Surgical Registrar to the Charing-cross Hospital London

FAULL, WM L.R.C.P L.R.C.S Edin. L.F.P.S Glasg. has been appointed Resident Surgeon to the Dewsbury and District Infirmary vice J Prior resigned

FEATHERSTONE, G W B. L.R.C.P Lond M.R.C.S. has been appointed Medical Officer of Health by the Painscastle Rural District Council

FLOEN C M. M.R.C.S, L.R.C.P Ed. D.P.H Dubl has been appointed Medical Officer of Health by the Croydon Rural District Council also Physician to the Isolation Hospital, Beddington corner Mitcham.

FISON E. T M.D Cantab. F.R.C.S Edin., M.R.C.S., L.R.C.P has been appointed Physician to the Salisbury Infirmary

FOSTER, W J, F.R.C.S Eng L.R.C.P Lond has been appointed Surgeon to the Royal Berkshire Hospital Reading, vice J A. P Price

GRUGGEN W L.R.C.P Irel L.F.P.S Glasg. D.P.H. Camb., has been re-appointed Medical Officer by the South Mims Rural District Council

HARRINSON G R. M.B. B.Ch. R.U.I. has been appointed Junior House Surgeon to the Belfast Royal Victoria Hospital.

HIGGINSON CHARLES GASKELL M.R.C.S L.R.C.P L.S.A., has been appointed an Honorary Medical Officer to the Pendleton Branch Dispensary vice J A. Albrecht resigned.

INGLES, J W M.B. B.S Edin. has been appointed Resident Medical Officer at the East Poorhouse by the Dundee Parish Council.

JOHNSTON, R J B.A. M.B. B.Ch. R.U.I has been appointed Extern House Surgeon to the Belfast Royal Victoria Hospital.

LE QUESNE C P L.R.C.P Lond M.R.C.S has been appointed Medical Officer Southampton Dispensary vice Ernest Blacker resigned.

MAWSON J A. M.R.C.S., L.R.C.P has been appointed Resident Medical Officer at the Ida Hospital Leeds.

MONTPENY, H J, M.B. B.Ch. R.U.I, has been appointed House Physician to the Belfast Royal Victoria Hospital

MOORHOUSE, O H. M.B Vict. has been appointed a House Physician to the General Infirmary Leeds.

POOLE, A. H. L.R.C.P L.R.C.S Edin. L.F.P.S. Glasg has bee appointed Medical Officer of Health by the Tottenham District Council.

RACK J PERCY L.S.A. Lond. has been appointed House Surgeon to the Kidderminster Infirmary and Children s Hospital.

RIDDELL, R. G., M.B Ch.B Edin. has been appointed Senior House Surgeon to the Borough Hospital Birkenhead.

ROSS RONALD Major of the Indian Medical Service M.R.C.S has been appointed Lecturer on Tropical Medicine by the Council of University College Liverpool.

SMITH, JOHN W F.R.C.S Eng M.B Edin. has been appointed Visiting Surgeon to the Chorlton Union Hospital at Withington Manchester

SPONG A. M.B. Ch.B Vict. has been appointed House Surgeon to the General Infirmary Leeds

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to recognise the senior examinations of the Welsh Intermediate Education Board and also the degree of science of the University of Wales

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Dr Leech continues chairman of the Pharmacopœia Committee, Mr Bryant remains chairman of the Finance Committee, while the President will be *ex officio* chairman of the Dental Committee.

The Examination Committee will consist of the following members For England Sir Dyce Duckworth (chairman), Mr Bryant, and Mr Teale, for Scotland Dr Heron Watson, Dr Pettigrew, and Dr McVail, and for Ireland Dr Little, Sir William Thomson, and Sir Philip C Smyly

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Vote of Thanks

The proceeding of the Council terminated soon after five o'clock The minutes of the sitting were read and confirmed Just before separating, however, Dr GLOVER thought the Council ought to accord to the President a very cordial vote of thanks for the patience with which he had presided during this very prolonged session Sir CHRISTOPHER NIXON supported this suggestion, which was received with applause by the members present

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* Awarded gold medal. † Awarded mark of commendation.

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Notes, Short Comments, and Answers to Correspondents.

THE VALUE OF PROFESSIONAL UNION

print below a letter from a member of the medical profession which similar in tone to many communications which we have received om time to time. We do not give it publicity however only because gives expression to opinions which would appear to be as wide-read as they are natural and erroneous but because it affords an cellent object lesson in the helplessness of single-handed action. ur correspondent's letter which is headed "Unqualified Assistants" ins as follows:—

To the Editors of THE LANCET.

SIRS,—The unqualified class of medical gentlemen still flourish and from what I can learn there is but little to prevent them doing so. Some short time since I wrote to the General Medical Council acquainting the Registrar of a most glaring case in which a firm of surgeons employ an unqualified lad who has never attended a medical school and, so far as is known, not so much as passed a preliminary examination. His duties are not confined to dispensing (for which he has not the Apothecaries Hall certificate) cleaning the surgery and polishing the door-plate but he visits private club, and pauper patients, those in the workhouse and also those in receipt of parish relief attends midwifery cases, and prescribes for patients in the surgery. To the Registrar I gave the names with dates of several patients who had been visited and attended to by this unqualified lad.

I am informed that the General Medical Council do not intend interfering with any case unless a statutory declaration be made before a magistrate or a commissioner of oaths. What is the use of the General Medical Council passing a law in which it is stated that any medical man employing an unqualified assistant to visit &c. is guilty of infamous conduct? This notice was sent to every medical man on the Register and yet this firm of surgeons take not the slightest notice of it. I do not intend undertaking any expenses myself but anyone would have thought that the General Medical Council upon hearing of cases in which their resolutions are taken no notice of would have gone into the matter themselves and done their best to stop this scandal to the medical profession. Would it not be better before allowing Italians to practise in England to see that the profession is carried on decently at home?

I am, Sirs, yours faithfully,

June 5th, 1899. M.R.C.S. ENG.

"M.R.C.S. Eng." in his letter shows that he does not clearly comprehend what is the real scope of the work of the General Medical Council. The General Council of Medical Education and Registration of the United Kingdom, to give the body its correct name, was created for the good of the public to keep a Register of qualified medical practitioners so that the public may know who are and who are not properly equipped medical men. That no names of ignorant persons may find their way into the pages of this Register it becomes the duty of the General Medical Council to insist upon a proper educational standard being exacted from their students by all corporations and universities granting medical titles. That only the names of persons possessing that degree of moral repute and scrupulousness which all civilised peoples demand of their medical attendant may be included in the Register the General Medical Council is given power to expunge from the roll the names of persons proved unworthy to remain members of the medical profession. This last task of the General Medical Council is neither the most important nor the largest section of its work. But to satisfy "M.R.C.S. Eng." the Council would have neither time nor opportunity to do anything but attend to the purging of the Register. The General Medical Council is the tribunal before which the alleged offender can be brought, but it is not within the scope of its duties any more than it is within the scope of the duties of a judge of the High Court to go round the country hauling prisoners before itself. Judges again, do not investigate crimes in response to information received from private individuals and the same precaution is taken by the General Medical Council. Proper machinery exists for the arraignment of legal offenders and only when a prisoner is brought into court in accordance with legal formality can he be tried and punished. Here the parallel between the High Court and the General Medical Council ceases, for the Council is not assisted by policemen and detectives to say nothing of all the other machinery that exists for the prevention and punishment of crime. There is no provision in the Act for the expenditure of funds in such a way and this ought to have occurred to "M.R.C.S. Eng." before he expressed his belief that it was the duty of the Council "to go into the matter themselves."

The lesson to be learned from the check which "M.R.C.S. Eng." has received in his very proper attempt to bring offending medical practitioners to the notice of the General Medical Council is the absolute necessity for union among members of the medical profession. If "M.R.C.S. Eng." is a member of the Medical Defence Union or the London and Counties Medical Protection Association, or any body with similar objects, he can lay the matter before them produce the detailed evidence of which he is the possessor and expect the rest to be done for him. If he is backed by the medical men of the neighbourhood his action as common informer would lose invidiousness and he will be able to bring the case to the General Medical Council with the certainty of its receiving proper attention and with no fear lest anyone should cast upon him the imputation of having been actuated by professional jealousy. We sympathise with him in his view that the General Medical Council is placed in an unfortunate position when it issues a strict edict which members of the medical profession can disregard with impunity. But it is wrong to attribute supineness to the General Medical Council because it does not do its own detective work. The regulations of the Council concerning the employment of unqualified assistants were issued in behalf of the medical profession at large and, hardly as they pressed upon some members of the medical profession and on the whole of a large class of men with whom the medical profession had been for many years closely associated, still they worked for the good of the profession. It is therefore the duty of the profession by united action to assist the Council to enforce their regulations.

THE MEMORIALS OF THE CORPORATE AND MEDICAL REFORM ASSOCIATION LIMITED."

THE Corporate and Medical Reform Association Limited desires to acknowledge with thanks the following further donations to its Special Voluntary Fund for the purposes of the memorials against certification of unqualified practitioners (midwives and opticians). The resolutions of the General Medical Council on June 9th in reply to the memorials concede the principle affirmed by the memorialists, but until applied by means of successful test cases are valueless for practical purposes and the maintenance of these important principles by every constitutional means calls for further combined and energetic action.

	£	s.	d.		£	s.	d.
Mr. G. A. Critchett (second donation)	1	1	0	Mr. J. B. Lawford	1	1	0
Mr. Walter Edmunds	1	1	0	Mr. F. M. Mackenzie	1	1	0
Mr. H. E. Juler (second donation)	1	1	0	Dr. Joseph Nelson	1	1	0
				Mr. H. Secker Walker	1	1	0

Donations may be sent per crossed cheque or postal order to the honorary secretaries Dr. Tom R. Taylor and Mr. R. B. Anderson at the registered offices 2, Southampton street Strand, W.C., or to Mr. R. B. Anderson acting pro-treasurer 32, Montague-place London, W.C.

TOUTING.

A MEDICAL man writes under the *nom de plume* of *Izal*:—

1. The medical practitioners around —— in the carrying out of their private clubs have recourse to employing men generally called collectors whose duty is not only to secure members (a system of touting) but likewise to collect the individual subscriptions quarterly. 2. Would it be considered a justifiable act to provide any man or woman who is in no way qualified or competent with a few drugs and other necessaries that he or she might treat minor complaints and injuries thereby saving a practitioner the trouble of attending to such cases personally? I greatly wish to ascertain whether these two methods would be thought customary and consistent with the high principles which govern all well-meaning practitioners."

To these questions we have to reply:—1. It has always been considered discreditable to employ touts. Now that the General Medical Council has expressly stated that it "regards it as unprofessional" for a medical man "to hold the appointment of medical officer to any associations which systematically practise canvassing" it behoves the practitioner to be very careful how he conducts his private club. 2. Unqualified assistants may not practise save as dressers and assistants.

WHAT IS YOUR FEE?

To the Editors of THE LANCET.

SIRS,—At Marylebone County Court on June 1st in a case in which I was plaintiff I was asked "What is your fee?" I might truthfully have answered that I have accepted 12 guineas as a fee where the patient's friends were not in a position to pay 20 guineas and that fee has been paid with expressions of gratitude in a case infinitely less troublesome than the one under consideration but though the friends were not in a position to give thousands of pounds for a public-house they could appreciate the value of professional services. In the present case I had seen and attended to the patient 51 times and I made an inclusive charge of five guineas, which as the judge remarked, was very moderate. The defence was that on a previous occasion I had attended defendants on for 1s. for each attendance. It was suggested that my fee was 1s. I stated that my usual fee in such a case would be from 2s. 6d. to 5s. but it was true that in the case of poor people I accepted a cash payment of 1s. when the patients were too poor to pay more. This arrangement is of course for the poor only and a cash payment is the essence of the contract. The defendant could not plead ignorance of this fact for he stated in court that when his boy went without a shilling he was sent back to get it. The facts are as follows: A boy came into my waiting room with a shabby looking companion a cut in the forehead, and a shilling. My son dressed the wound antiseptically put in two sutures and accepted the shilling telling me afterwards that it ought to have been more but that

TARR, WILLIAM, M.B. Ch B has been appointed Senior House Surgeon to the Johannesburg Hospital.

TOTHILL F C M.B. C M. Edin has been appointed Medical Officer for the Staines Sanitary District of the Staines Union.

WATTS, W F M R C S has been re-appointed Honorary Surgeon to the Dewsbury and District Infirmary

WIGHAM, W H, M.B. Durh M R C S., has been re-appointed Medical Officer by the South Molton Town Council

WILLIAMS, J H M D Edin M S has been appointed Medical Officer of Health by the Connah s Quay Urban District Council

WRAITH, R. A., M.R.C P, L.R.C P has been appointed House Physician to the General Infirmary, Leeds

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

ADDENBROOKE S HOSPITAL, Cambridge.—Resident House Surgeon. Board, lodging, and washing provided in the hospital. No salary

ANCOATS HOSPITAL, Manchester —Resident Junior House Surgeon Salary £50, with board and washing —Also Resident Senior House Surgeon Salary £80 with board and washing

BOROUGH ASYLUM Portsmouth —Junior Assistant Medical Officer Salary £100 with board lodging and washing.

BOROUGH HOSPITAL, Birkenhead —Visiting House Surgeon Salary £75 per annum, with board, lodging and washing No wine spirits, or beer

BOROUGH OF BURTON UPON TRENT —Medical Officer of Health for the District of the Borough Salary at the rate of £350 per annum exclusive of authorised disbursements payable quarterly —Applications to the Town Clerk, Burton upon Trent.

BRADFORD ROYAL INFIRMARY —Dispensary Surgeon unmarried. Salary £100 per annum with board and residence.—Also Junior House Surgeon unmarried. Salary £50 per annum with board and residence.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray s Inn road, W C —Assistant House Surgeon. Salary at the rate of £50 per annum. Rooms not provided

COUNTY ASYLUM, Rainhill near Liverpool.—Senior Assistant Medical Officer unmarried Salary commences at £225 per annum with prospect of increase to £250 with furnished apartments, board, attendance, and washing

DERBYSHIRE ROYAL INFIRMARY Derby —Honorary Surgeon

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark S E —Junior Resident Medical Officer and Registrar Salary £50 with board and washing

FISHERTON ASYLUM.—Assistant Medical Officer Salary £120 per annum to commence, with board lodging, and washing Apply to Dr Finch, The Asylum Salisbury

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION Gloucester —Physician.

GLASGOW CORPORATION —Bacteriologist in connexion with the Health Department of the City Salary at the rate of £350 per annum —Applications to Clerk to the Corporation (Police Department) Glasgow

GREAT NORTHERN CENTRAL HOSPITAL, Holloway road N —Physician to Out-patients.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST Brompton —Resident House Physicians

HUDDERSFIELD INFIRMARY —Assistant House Surgeon Salary £60 per annum, with board, residence, and washing

LANCASTER UNION —Medical Officer for the Southern District of the Union. Salary £45 per annum, with certain extra fees, subject to statutory deductions. Apply to the Clerk to the Guardians, 5 Dalton square, Lancaster

LIVERPOOL DISPENSARIES 34, Moorfields Liverpool. — Assistant Surgeon, unmarried Salary £100, with board and residence

LIVERPOOL NORTHERN HOSPITAL.—Assistant House Surgeon Salary £70 per annum, with residence and maintenance in the House.

LONDON (ROYAL FREE HOSPITAL) SCHOOL OF MEDICINE FOR WOMEN, 8, Hunter-street, Brunswick square W C —Lecturer on Biology and Lecturer on Public Health

MANCHESTER CHILDREN S HOSPITAL, Gartside-street, Manchester — Medical Officer for the Dispensary Salary £180 per annum

MASON UNIVERSITY COLLEGE, Birmingham (with Queen s Faculty of Medicine) —Professorship of Physiology

NEWPORT AND MONMOUTHSHIRE HOSPITAL.—House Surgeon. Salary £100 per annum with board and residence (no stimulants provided)

NORTH LONDON HOSPITAL FOR CONSUMPTION Hampstead.—Surgeon and Assistant Physician to Out-patients.—Also Assistant Resident Medical Officer for six months. Honorarium at the rate of £60 per annum. Applications to the Secretary Offices, 41, Fitzroy-square, W

OWENS COLLEGE, Manchester —Senior Demonstrator in Physiology Stipend £150 per annum, rising to £200.

PORTLAND TOWN DISPENSARY Henry street London N W —Resident Medical Officer Salary £80

RAMSGATE AND ST LAWRENCE ROYAL DISPENSARY AND THE GENERAL HOSPITAL AND SEAMEN S INFIRMARY —Resident Medical Officer unmarried. Salary £100 per annum, with furnished apartments, board, and attendance £10 allowed for substitute during annual holiday Applications to the Secretary Ramsgate and St. Lawrence Royal Dispensary

ROYAL BERKS HOSPITAL, Reading —House Surgeon Salary £60 per annum, with board lodging and washing —Also Assistant House Surgeon Salary £30 per annum with board, lodging, and washing. Both appointments for one year

ROYAL SOUTH HANTS INFIRMARY Southampton —Assistant House Surgeon for six months. Salary at the rate of £50 per annum with board residence washing, &c.

ROYAL UNITED HOSPITAL, Bath.—House Surgeon on July 1st for three months. Salary at the rate of £60 per annum, with board lodging and washing

ST BARTHOLOMEW'S HOSPITAL MEDICAL SCHOOL, London E.C —Assistant Demonstrator of Chemistry

ST MARYLEBONE GENERAL DISPENSARY 77 Welbeck street London, W —Ophthalmic Surgeon

ST PANCRAS AND NORTHERN DISPENSARY 128, Euston road London.—Honorary Physician and an Honorary Surgeon. Applications to the Honorary Secretary 23, Gordon street Gordon-square W C

SEAMEN S HOSPITAL SOCIETY (*Dreadnought*), Greenwich S E.—House Surgeon Salary £50 per annum with board, residence, and washing Also Surgeon to the Dispensary 51 East India Dock road E. Salary £63 per annum.

SHAFTESBURY HOUSE PRIVATE ASYLUM Formby near Liverpool.—Junior Medical Officer Salary £50 per annum, with board, lodging and washing

STOCKTON AND THORNABY HOSPITAL Stockton-on Tees.—House Surgeon non resident. Salary £200 per annum.

UNIVERSITY OF GLASGOW —Assistant Examiner Salary £30 per annum

UNIVERSITY COLLEGE, Bristol.—Professorship of Physiology

WALSALL AND DISTRICT HOSPITAL, Leicester-street, Walsall.—Resident House Surgeon. Salary £100 per annum with board lodging and washing

WEST-END HOSPITAL FOR NERVOUS DISEASES, Welbeck-street London. —Medical Registrar for six months (non resident). Honorarium 25 guineas.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Assistant House Surgeon for six months. Honorarium at the rate of £50 per annum given and board, lodging, and washing provided

Births, Marriages, and Deaths.

BIRTHS

BATTEN —On June 13th at Lordship-lane Dulwich, S E., the wife of George B Batten M.D of a daughter

CLARKE.—On June 10th at Windsor House, Morley the wife of W Travers Clarke M.R.C S L.R.C.P of a daughter

EVANS.—On June 7th at Tavitou street, Gordon-square, the wife of Willmott Evans, B S F R.C S of a son.

GOODSALL.—On June 3rd, at Devonshire-place W., the wife of David Henry Goodsall, F R C S of a son

HOFFMAN —On June 12th, at Wylcwm House Knighton Radnorshire the wife of Arthur H. Hoffman M D of a daughter

KING —On June 8th, at Nicholas street, Chester the wife of Henry W King M D of a son

MURRELL —On June 7th the wife of G F Murrell M B., of Craven-road, Reading of a daughter

SMITH.—On June 5th at Lynton House Warrington, the wife of Reginald Smith, M.R.C S L.R.C P., of a son

MARRIAGES

ATTFIELD—HERKOMER.—On June 14th at the parish church Bushey Herts by the Rev G Montague Hall assisted by the Rev James Herbert Harvey M A., cousin of the bridegroom Donald Harvey Attfield M A. M B, son of John Attfield F R.S of Watford, Herts to Elsa Anna Iole Herkomer elder daughter of Hubert Herkomer R.A of Bushey Herts

BEST—MORE.—On June 9th at Holy Trinity Church, Rothwell, by the Rev W S. Parker vicar assisted by the Rev R. H B. Crosthwaite, curate, Fredrick Henry de Graves Best, M.R C.S Eng L.R.C P Lond, elder son of F A. Best Esq, Mount Gerrard Torquay to Elizabeth Beatrix (Bessie) only daughter of James More Esq, M.D Rothwell Kettering Northamptonshire

HOPE—BOWRING —On June 7th at Christ Church, Linnet lane, Liverpool Edward W Hope M D medical officer of health of the city of Liverpool to Charlotte Rennie second daughter of the late John Bowring Terra Nova, Sefton park Liverpool

LANSDOWN—LATTEY —On June 6th at Southam Warwickshire Gilbert H Lansdown, A K.C. L.R.C P youngest son of the late George Lansdown of Wimbledon to Edith Mary eldest daughter of Walter Lattey, M.D, Southam

MOORE—SWEPSTONE —On June 8th, at St John s Church, South Hackney Edward J Fleetwood Moore, L.R.C P Lond., M.R C.S Eng son of Dr Moore of Victoria park to Lilian third daughter of the late W H Swepstone, of Northumberland Houses, King Edward road Hackney

NIX—COOKE.—On May 24th, at Oakington, by the Rev H G Hooton Rupert B Nix, of Bury St. Edmunds, to his cousin Edith M Cooke, of Oakington, Cambridge

ROUGHTON—GODFREY —On June 12th at St Peter s, Bayswater by the Rev Q Le Acland and the Rev R. Rumsey uncles of the bride, the Rev H G Rosedale vicar and the Rev G Terry senior curate, Edmund Wilkinson Roughton B.S M D F R.C.S of 38, Queen Anne-street Cavendish square W son of the late Robert Roughton R.N to Ethel Houlton younger daughter of Robert Seppings Godfrey Registrar of the Supreme Court and of 6, Ladbroke-gardens W

ROUTCH—DONALDSON —On June 10th at St. Paul s, Newton Abbot Frederick Routch Physician and Surgeon of Upper Grosvenor-road Tunbridge Wells to Gertrude (Tottie) Donaldson only daughter of the late John Lockwood Donaldson of Clifton, Bristol

DEATHS

FERGUSON —Suddenly at Cove Hotel on June 7th Major Ferguson I M.S., second son of the late John Ferguson, M D M R.C S Cove, Kincardine.

PARR.—On June 10th, at Upper Phillimore-place Kensington, George Charles Parr M D aged 56.

TAIT —On June 13th, at his residence St. Petrock s Llandudno West, Lawson Tait aged 54

N B —A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS

MONDAY (19th).—London (2 P.M.) St. Bartholomew's (1.30 P.M.) St Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.) Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.) City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.) West London (2.30 P.M.), London Throat (2 P.M.)

TUESDAY (20th).—London (2 P.M.), St Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.) Westminster (2 P.M.) West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.) St Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.) Royal Ear (3 P.M.)

WEDNESDAY (21st).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.) Royal Free (2 P.M.) Middlesex (1.30 P.M.) Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.) St. George's (Ophthalmic 1 P.M.) St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.) Samaritan (2.30 P.M.), Gt Ormond street (9.30 A.M.) Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.) Metropolitan (2.30 P.M.) London Throat (2 P.M.) Cancer (2 P.M.)

THURSDAY (22nd).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St George's (1 P.M.) London (2 P.M.), King's College (2 P.M.) Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.) North West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) St. Mark's (2 P.M.).

FRIDAY (23rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.) St. Mary's (2 P.M.), Ophthalmic 10 A.M.), Cancer (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.) London Throat (2 P.M. and 6 P.M.)

SATURDAY (24th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.) London (2 P.M.) University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic (9 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily

SOCIETIES

WEDNESDAY (21st).—ROYAL MICROSCOPICAL SOCIETY (20 Hanover square, W.)—7.30 P.M. Mr C Beck: Exhibition of Wild Flowers with Microscopes. 8 P.M. Mr J Y Johnson: Notes on some Sponges belonging to the Clionidæ obtained at Madeira.

ROYAL METEOROLOGICAL SOCIETY (70 Victoria street, Westminster S.W.)—4.30 P.M. Ordinary Meeting Papers:—Mr R. H Scott: Heavy Falls of Rain recorded at the Observatories connected with the Meteorological Office 1871–1893.—Mr R. C Mossman: Average Height of the Barometer in London.—Mr J Baxendell: A new Self-recording Anemoscope.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

MONDAY (19th).—CENTRAL LONDON THROAT NOSE AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr W Wingrave: The Clinical Anatomy and Physiology of the Mouth and Pharynx

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr C B. Keetley: Injuries and Deformities of the Upper Extremity

TUESDAY (20th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Mr Ballance: Surgery of the Nervous System.

WEDNESDAY (21st).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton)—4 P.M. Dr Schorstein: Asthma.

ST JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr M. Dockrell: Disorders of Sweat Glands. (Post-graduate Course.)

THURSDAY (22nd).—CENTRAL LONDON THROAT NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.)—5 P.M Dr D Grant Diagnosis and Treatment of Dangerous Sequelæ of Otitis.

CHARING-CROSS HOSPITAL.—4 P.M. Dr Mott: Demonstration of Medical Cases (Post-Graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond street, W.C.)—4 P.M Dr Voelcker: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.)—5 P.M. Dr J B Ball: The Symptoms of Throat and Nose Affections

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During the week marked copies of the following newspapers have been received *East Anglian Daily Times Midland Evening News Wigan Examiner Dundee Courier Bradford Observer Sheffield Daily Telegraph Councillor and Guardian (London) Hereford Times, Leicester Daily Post Glasgow Herald Scotsman Sussex Daily News, Torquay Directory Cornish Telegraph, Advocate of India (Bombay), Times of India, Pioneer Mail Western Morning News Blackburn Daily Telegraph, Birmingham Daily Post, Brighton Gazette, Kentish Mercury Liverpool Daily Post Cannock Chase Courier Sanitary Record, Citizen, Builder Architect Bristol Mercury York Herald, Madras Standard Health, Science Siftings Leeds Mercury Herts Advertiser and St Albans Times, Mining Journal, City Press Reading Mercury, Hertfordshire Mercury Cheltenham Examiner, African Times, Isle of Man Examiner, Weekly Free Press and Aberdeen Herald, Local Government Journal, Surrey Advertiser, Local Government Chronicle Elgin Courant Chudleigh Express Sidmouth Observer Daily Messenger Bicester Herald Ea Ingwold Advertiser, Public Opinion, Naval and Military Record Flintshire Observer, Toronto Daily Mail Wakefield Herald, Birkenhead News, Melbourne Argus &c. &c.*

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER'S NOTICES.

TO SUBSCRIBERS

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect

The rates of subscriptions, post free, either from THE LANCET Offices or from Agents, are —

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SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE It has come to the knowledge of the Manager that in some cases higher rates are being charged, on the plea that the heavy weight of THE LANCET necessitates additional postage above the ordinary rate allowed for in the terms of subscriptions Any demand for increased rates, on this or on any other ground, should be resisted The Proprietors of THE LANCET have for many years paid, and continue to pay, the whole of the heavy cost of postage on overweight foreign issues, and agents are authorised to collect, and do so collect, from the Proprietors the cost of such extra postage

The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND

he supposed from appearances that it was all the patient could afford. A few days afterwards the boy appeared again and said he had "come to have the stitches out." Being asked if he had any money he said, 'Oh no I paid *the shilling* the other night." Being told that he would not be looked at without a further payment he shortly reappeared with the required coin The sutures were removed a few days afterwards when a third shilling was paid The wound had healed by first intention and no further treatment was necessary Some two months afterwards a well-dressed, prosperous looking man came in bringing with him a little girl with a wounded forehead. My son wished to put in a suture but the father objected, so it was dressed otherwise. The next day the father came again with the child. I saw him asked his name and address and that was the first time that I knew of the existence of the licensed victualler and public-house proprietor who became defendant in this case. Though near my house I did not even know the name of the hotel till he told me Seeing before me a man of means I said nothing about payment unless I may have suggested that it had better stand over until the case was concluded, his appearance and address being sufficient guarantee that the money would be forthcoming when the case was completed. I supplied bandages lint protective tissue, &c., regardless of cost, and brought the case to a successful issue the scar which from want of a suture might have been a sad disfigurement on the forehead of a pretty girl being scarcely perceptible Now the attendance involved 51 dressings but wishing to avoid anything that might be considered overcharge I made an inclusive charge of five guineas, offering a reduction even on that if desired provided it were settled by a certain date No notice was taken of this and eventually I had to put the case in the county court.

The judge ruled that as I had attended the boy for 1s each attendance I could not claim more for the girl and obliged me to accept about half my claim Is it justice?

I am, Sirs yours faithfully,

June 3rd 1899 M R C S ENG., &c.

VERMINOUS CLOTHING

To the Editors of THE LANCET

SIRS —At a small general hospital recently opened in our town we have had considerable difficulty in dealing with patients verminous clothing before storing them. We have no steam apparatus about the house and it is not worth our while going to the expense (which would be considerable) of a special steam press for the sake of dealing with one or two suits in the month. Much of the clothing would not survive boiling or even soaking in germicidal solutions. I have thought of constructing a small chamber in which such clothes could be suspended in an atmosphere periodically saturated with some volatile "insecticide" such as formalin, &c. I shall be much indebted to any of your readers who can tell us how similar difficulties have been overcome elsewhere. I am Sirs, yours faithfully,

June 14th, 1899 PED CORP

MEDICAL PRACTICE IN MASHONALAND

In answer to Artegall s" query in THE LANCET of April 8th "H S " writing from the British South Africa Company s Hospital, Umtali, says "As to the prospects of a medical man settling in Mashonaland I am afraid I cannot give an encouraging reply At present the population is too thin and scattered the population of the whole country just now not exceeding that of a moderate-sized Yorkshire village. There are five townships—Salisbury, Umtali, Victoria, Melsitte, and Enkeldoorn. Salisbury and Umtali have nine medical men each of the other three are looked after by the Government district surgeons, certain other districts such as Hartley Lomajundis and the Abercorn, where British South African police are stationed are attended to by police surgeons I imagine it will be some time before the population of either of these districts would warrant the presence of another medical man. If Artegall really wishes to settle in Mashonaland I should advise him to apply at the British South African Company's office in Cape Town until he gets an appointment I do not think vacancies are ever filled in England The country is excessively healthy and except during the summer-autumn period after the rains, when malaria is somewhat prevalent, there is very little work to do.'

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THE latest official return under this head has features of special interest During 1897 there were born in Italy 1,101,848 additions to the population and there died of that number 695,602. Of the births 566,654 were males and 535 194 females of the deaths 352,038 were males and 343,564 females From 1872 onwards the year in which the death rate was highest was 1880 with the portentous total of 869 992 deaths. The greatest number of births was in 1887—amounting to 1,152,906 The greatest percentage of births was in the Abruzzi (40·24 per 1000 inhabitants) the smallest in Piedmont (29 58 per 1000) Latium has 35 79 and Lombardy 35 31. The number of illegitimate births in 1897 was 70 199 sub-divided into 35 763 males and 34 436 females. Of the total of illegitimate children 41,366 were recognised by one or both of their parents the other 28,833 were not but relegated in most cases to the tender mercies of the Brefotrofio (foundling hospital) with its scandalously high death rate—sometimes cent. per cent. The highest total of illegitimate births comes from Latium (which figures almost in the first line) from the Romagna, and from Sicily In 1897 there were in all Italy 13 124 double births and 174 triplets In these latter Lombardy beats the record" with its 23, then comes Venice with 27 In the Roman province for all the year there were seven cases of triplets. Finally Liguria produced one case, unique in the Italian kingdom, of a parto quadruplo" (quadruple birth)—a mother having given to the world four females at once.

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CAN any of our readers inform a correspondent where he can obtain full particulars concerning M. Dussaud s microphonograph?

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METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Stewart's Instrument)

THE LANCET Office, June 15th, 1899.

Date	Barometer reduced to Sea Level and 32° F	Direction of Wind	Rainfall	Solar Radiation in Vacuo	Highest Temp. Shade	Min. Temp	Wet Bulb	Dry Bulb	Remarks at 8.30 A.M.
June 9	30 39	E		110	68	50	48	53	Cloudy
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" 11	30 24	E		114	73	52	51	55	Cloudy
" 12	30 15	S W	"	116	78	53	56	59	Hazy
" 13	30 09	N E	"	106	74	54	53	57	Cloudy
" 14	29·95	N E		94	69	47	48	53	Cloudy
" 15	30 12	N E	"	110	71	47	51	57	Fine

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS

SUNDAY (18th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.) St Thomas's (3.30 P.M.) St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.) Samaritan (Gynæcological, by Physicians, 2 P.M.) Soho-square (2 P.M.), Royal Orthopædic (2 P.M.) City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.)

MONDAY (19th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.) Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.) St. Mary's (1 P.M.), St Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.) London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.)

WEDNESDAY (21st).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.) Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.) St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.) St. George's (Ophthalmic 1 P.M.) St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.) Gt. Northern Central (2.30 P.M.) Westminster (2 P.M.) Metropolitan (2.30 P.M.), London Throat (2 P.M.) Cancer (2 P.M.)

THURSDAY (22nd).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St George's (1 P.M.), London (2 P.M.), King's College (2 P.M.) Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.) Soho-square (2 P.M.) North West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) St. Mark's (2 P.M.).

FRIDAY (23rd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.) St. Thomas's (3.30 P.M.) Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.) St. Mary's (2 P.M.), Ophthalmic 10 A.M.), Cancer (2 P.M.) Chelsea (2 P.M.) Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.) London Throat (2 P.M. and 6 P.M.)

SATURDAY (24th).—Royal Free (9 A.M. and 2 P.M.) Middlesex (1.30 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), University College (9 10 P.M.) Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.) London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic 10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily

SOCIETIES

WEDNESDAY (21st).—ROYAL MICROSCOPICAL SOCIETY (20 Hanover square, W.)—7.30 P.M. Mr C Beck: Exhibition of Wild Flowers with Microscopes. 8 P.M. Mr J Y Johnson: Notes on some Sponges belonging to the Clionidæ obtained at Madeira.

ROYAL METEOROLOGICAL SOCIETY (70 Victoria street, Westminster S.W.).—4.30 P.M. Ordinary Meeting Papers:—Mr R. H Scott: Heavy Falls of Rain recorded at the Observatories connected with the Meteorological Office, 1871–1893.—Mr R. C Mossman: Average Height of the Barometer in London.—Mr J Baxendell: A new Self-recording Anemoscope.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

MONDAY (19th).—CENTRAL LONDON THROAT NOSE AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr W Wingrave: The Clinical Anatomy and Physiology of the Mouth and Pharynx

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.)—5 P.M. Mr C B. Keetley Injuries and Deformities of the Upper Extremity

TUESDAY (20th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Mr Ballance Surgery of the Nervous System.

WEDNESDAY (21st).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton)—4 P.M. Dr Schorstein: Asthma.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr M. Dockrell: Disorders of Sweat Glands. (Post-graduate Course.)

THURSDAY (22nd).—CENTRAL LONDON THROAT NOSE, AND EAR HOSPITAL (Gray's Inn road, W.C.).—5 P.M Dr D Grant: Diagnosis and Treatment of Dangerous Sequelæ of Otitis.

CHARING-CROSS HOSPITAL.—5 P.M. Dr Mott: Demonstration of Medical Cases. (Post-Graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond street, W.C.)—4 P.M. Dr Voelcker: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.)—5 P.M. Dr J B. Ball: The Symptoms of Throat and Nose Affections

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During the week marked copies of the following newspapers have been received *East Anglian Daily Times Midland Evening News Wigan Examiner Dundee Courier Bradford Observer Sheffield Daily Telegraph, Councillor and Guardian (London) Hereford Times, Leicester Daily Post Glasgow Herald Scotsman Sussex Daily News Torquay Directory Cornish Telegraph Advocate of India (Bombay) Times of India, Pioneer Mail Western Morning News Blackburn Daily Telegraph, Birmingham Daily Post, Brighton Gazette Scottish Mercury Liverpool Daily Post Cannock Chase Courier Sanitary Record, Citizen, Builder Architect, Bristol Mercury Yorkshire Post, Madras Standard Health, Science Siftings Leeds Mercury Herts Advertiser and St Albans Times Mining Journal, City Press, Reading Mercury, Hertfordshire Mercury Cheltenham Examiner African Times, Isle of Man Examiner, Weekly Free Press and Aberdeen Herald, Local Government Journal, Surrey Advertiser Local Government Chronicle Elgin Courant, Chudleigh Express Sidmouth Observer Daily Messenger, Bicester Herald Lanfiyfold Advertiser, Public Opinion, Naval and Military Record, Finsbury Observer, Toronto Daily Mail Wakefield Herald, Birkenhead News, Melbourne Argus &c. &c.*

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub Editor"

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER'S NOTICES

TO SUBSCRIBERS

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices

Subscribers, by sending their subscriptions direct to THE LANCET Offices, will ensure regularity in the despatch of their Journals and an earlier delivery than the majority of Agents are able to effect

The rates of subscriptions, post free, either from THE LANCET Offices or from Agents, are —

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Six Months	0 16 3	Six Months	0 17 4
Three Months	0 8 2	Three Months	0 8 8

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SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE It has come to the knowledge of the Manager that in some cases higher rates are being charged, on the plea that the heavy weight of THE LANCET necessitates additional postage above the ordinary rate allowed for in the terms of subscriptions. Any demand for increased rates, on this or on any other ground, should be resisted The Proprietors of THE LANCET have for many years paid, and continue to pay, the whole of the heavy cost of postage on overweight foreign issues, and agents are authorised to collect, and do so collect, from the Proprietors the cost of such extra postage

The Manager will be pleased to forward copies direct from the Offices to places abroad at the above rates, whatever be the weight of any of the copies so supplied Address—THE MANAGER, THE LANCET OFFICES, 423, STRAND, LONDON, ENGLAND

be supposed from appearances that it was all the patient could afford. A few days afterwards the boy appeared again and said he had 'come to have the stitches out" Being asked if he had any money he said, 'Oh no, I paid *the shilling* the other night.' Being told that he would not be looked at without a further payment he shortly reappeared with the required coin The sutures were removed a few days afterwards when a third shilling was paid. The wound had healed by first intention and no further treatment was necessary Some two months afterwards a well-dressed, prosperous looking man came in bringing with him a little girl with a wounded forehead. My son wished to put in a suture but the father objected, so it was dressed otherwise. The next day the father came again with the child. I saw him asked his name and address and that was the first time that I knew of the existence of the licensed victualler and public-house proprietor who became defendant in this case. Though near my house I did not even know the name of the hotel till he told me Seeing before me a man of means I said nothing about payment unless I may have suggested that it had better stand over until the case was concluded his appearance and address being sufficient guarantee that the money would be forthcoming when the case was completed I supplied bandages lint protective tissue &c., regardless of cost, and brought the case to a successful issue, the scar which from want of a suture might have been a sad disfigurement on the forehead of a pretty girl, being scarcely perceptible Now, the attendance involved 51 dressings but wishing to avoid anything that might be considered overcharge I made an inclusive charge of five guineas, offering a reduction even on that if desired, provided it were settled by a certain date No notice was taken of this and eventually I had to put the case in the county court.

The judge ruled that as I had attended the boy for 1s each attendance I could not claim more for the girl, and obliged me to accept about half my claim. Is it justice?

I am, Sirs yours faithfully,

June 3rd 1899 M R C S ENG., &c.

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SOCIETIES

EDNESDAY (21st).—ROYAL MICROSCOPICAL SOCIETY (20 Hanover-square, W.)—7.30 P.M. Mr C Beck: Exhibition of Wild Flowers with Microscopes. 8 P.M. Mr J Y Johnson: Notes on some Sponges belonging to the Clionidæ obtained at Madeira.

ROYAL METEOROLOGICAL SOCIETY (70, Victoria street, Westminster S.W.).—4.30 P.M. Ordinary Meeting. Papers:—Mr R. H Scott: Heavy Falls of Rain recorded at the Observatories connected with the Meteorological Office, 1871–1893.—Mr R. C Mossman: Average Height of the Barometer in London.—Mr J Baxendell: A new Self-recording Anemoscope.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c

MONDAY (19th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr W Wingrave: The Clinical Anatomy and Physiology of the Mouth and Pharynx.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr C B. Keetley: Injuries and Deformities of the Upper Extremity

TUESDAY (20th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Mr Ballance: Surgery of the Nervous System.

WEDNESDAY (21st).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr Scherstein: Asthma.

ST JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr M. Dockrell: Disorders of Sweat Glands. (Post-graduate Course.)

THURSDAY (22nd).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn road, W.C.).—5 P.M. Dr D Grant: Diagnosis and Treatment of Dangerous Sequelæ of Otitis.

CHARING-CROSS HOSPITAL.—4 P.M. Dr Mott: Demonstration of Medical Cases. (Post-Graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond street, W.C.)—4 P.M. Dr Voelcker: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.)—5 P.M. Dr J B. Ball: The Symptoms of Throat and Nose Affections

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During the week marked copies of the following newspapers have been received *East Anglian Daily Times, Midland Evening News, Wigan Examiner, Dundee Courier, Bradford Observer, Sheffield Daily Telegraph, Councillor and Guardian (London), Hereford Times, Leicester Daily Post, Glasgow Herald, Scotsman, Western Daily News, Torquay Directory, Cornish Telegraph, Advocate of India (Bombay), Times of India, Pioneer Mail, Western Morning News, Blackburn Daily Telegraph, Birmingham Daily Post, Brighton Gazette, Scottish Mercury, Liverpool Daily Post, Cannock Chase Courier, Sanitary Record, Citizen, Builder, Architect, Bristol Mercury, York Herald, Post, Madras Standard, Health, Science Siftings, Leeds Mercury, Herts Advertiser and St Albans Times, Mining Journal, City Press, Reading Mercury, Hertfordshire Mercury, Cheltenham Examiner, African Times, Isle of Man Examiner, Weekly Free Press and Aberdeen Herald, Local Government Journal, Surrey Advertiser, Local Government Chronicle, Elgin Courant, Chudleigh Express, Sidmouth Observer, Daily Mercury, Bicester Herald, Ealing Gold Advertiser, Public Opinion, Naval and Military Record, Flintshire Observer, Toronto Daily Mail, Wakefield Herald, Birkenhead News, Melbourne Argus, &c. &c.*

EDITORIAL NOTICES

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff It is urgently necessary that attention be given to this notice

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication

We cannot prescribe or recommend practitioners

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor"

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager"*

We cannot undertake to return MSS not used

MANAGER'S NOTICES

TO SUBSCRIBERS

WILL Subscribers please note that only those subscriptions which are sent direct to the Proprietors of THE LANCET at their Offices, 423, Strand, W.C., are dealt with by them? Subscriptions paid to London or to local newsagents (with none of whom have the Proprietors any connexion whatever) do not reach THE LANCET Offices, and consequently inquiries concerning missing copies, &c., should be sent to the Agent to whom the subscription is paid, and *not* to THE LANCET Offices

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SUBSCRIBERS ABROAD ARE PARTICULARLY REQUESTED TO NOTE THE RATES OF SUBSCRIPTIONS GIVEN ABOVE It has come to the knowledge of the Manager that in some cases higher rates are being charged, on the plea that the heavy weight of THE LANCET necessitates additional postage above the ordinary rate allowed for in the terms of subscriptions Any demand for increased rates, on this or on any other ground, should be resisted The Proprietors of THE LANCET have for many years paid, and continue to pay, the whole of the heavy cost of postage on overweight foreign issues, and agents are authorised to collect, and do so collect, from the Proprietors the cost of such extra postage

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he supposed from appearances that it was all the patient could afford A few days afterwards the boy appeared again and said he had 'come to have the stitches out Being asked if he had any money he said, 'Oh no, I paid *the shilling* the other night. Being told that he would not be looked at without a further payment he shortly reappeared with the required coin The sutures were removed a few days afterwards when a third shilling was paid. The wound had healed by first intention and no further treatment was necessary Some two months afterwards a well-dressed, prosperous looking man came in bringing with him a little girl with a wounded forehead My son wished to put in a suture but the father objected, so it was dressed otherwise. The next day the father came again with the child I saw him asked his name and address and that was the first time that I knew of the existence of the licensed victualler and public-house proprietor who became defendant in this case. Though near my house I did not even know the name of the hotel till he told me. Seeing before me a man of means I said nothing about payment unless I may have suggested that it had better stand over until the case was concluded his appearance and address being sufficient guarantee that the money would be forthcoming when the case was completed I supplied bandages lint protective tissue, &c., regardless of cost, and brought the case to a successful issue, the scar which from want of a suture might have been a sad disfigurement on the forehead of a pretty girl, being scarcely perceptible. Now, the attendance involved 51 dressings but wishing to avoid anything that might be considered overcharge I made an inclusive charge of five guineas, offering a reduction even on that if desired, provided it were settled by a certain date No notice was taken of this and eventually I had to put the case in the county court.

The judge ruled that as I had attended the boy for 1s each attendance I could not claim more for the girl, and obliged me to accept about half my claim Is it justice?

I am, Sirs yours faithfully,

June 3rd 1899 M R C S ENG., &c.

VERMINOUS CLOTHING

To the Editors of THE LANCET

SIRS —At a small general hospital recently opened in our town we have had considerable difficulty in dealing with patients verminous clothing before storing them. We have no steam apparatus about the house and it is not worth our while going to the expense (which would be considerable) of a special steam press for the sake of dealing with one or two suits in the month Much of the clothing would not survive boiling or even soaking in germicidal solutions. I have thought of constructing a small chamber in which such clothes could be suspended in an atmosphere periodically saturated with some volatile "insecticide" such as formalin, &c. I shall be much indebted to any of your readers who can tell us how similar difficulties have been overcome elsewhere I am, Sirs, yours faithfully,

June 14th, 1899 PED CONP

MEDICAL PRACTICE IN MASHONALAND

In answer to Artegall's" query in THE LANCET of April 8th 'H S," writing from the British South Africa Company's Hospital Umtali, says: As to the prospects of a medical man settling in Mashonaland I am afraid I cannot give an encouraging reply At present the population is too thin and scattered the population of the whole country just now not exceeding that of a moderate-sized Yorkshire village. There are five townships—Salisbury, Umtali, Victoria, Melsitte, and Enkeldoorn. Salisbury and Umtali have nine medical men each of the other three are looked after by the Government district surgeons, certain other districts such as Hartley Lomajundis and the Abercorn, where British South African police are stationed, are attended to by police surgeons. I imagine it will be some time before the population of either of these districts would warrant the presence of another medical man If Artegall really wishes to settle in Mashonaland I should advise him to apply at the British South African Company's office in Cape Town until he gets an appointment I do not think vacancies are ever filled in England The country is excessively healthy and except during the summer autumn period after the rains, when malaria is somewhat prevalent, there is very little work to do."

THE 'MOVIMENTO DEMOGRAFICO" IN ITALY

THE latest official return under this head has features of special interest During 1897 there were born in Italy 1,101 848 additions to the population and there died of that number 695 602. Of the births 566,654 were males and 535 194 females of the deaths 352,038 were males and 343,564 females From 1872 onwards the year in which the death rate was highest was 880 with the portentous total of 869 992 deaths. The greatest number of births was in 1887—amounting to 1 152,906 The greatest percentage of births was in the Abruzzi (40·24 per 1000 inhabitants) the smallest in Piedmont (29 58 per 1000) Latium has 35 79 and Lombardy 35 31 The number of illegitimate births in 1897 was 70 199, sub-divided into 35,763 males and 34 436 females Of the total of illegitimate children 41,366 were recognised by one or both of their parents the other 28,833 were not but relegated in most cases to the tender mercies of the Brefotrofio (foundling hospital) with its scandalously high death rate—sometimes cent. per cent. The highest total of illegitimate births comes from Latium (which figures almost in the first line) from the Romagna, and from Sicily In 1897 there were in all Italy 13 124 double births and 174 triplets. In these latter Lombardy beats the record" with its 28, then comes Venice with 27 In the Roman province for all the year there were seven cases of triplets Finally Liguria produced one case unique in the Italian kingdom of a "parto quadruplo" (quadruple birth)—a mother having given to the world four females at once.

A QUESTION OF SEWAGE DISPOSAL

To the Editors of THE LANCET

SIRS,—Would any of your readers be so kind as to advise me as to the best *brochure* on sewage disposal for a limited population where water carriage is not available? The problem with which I have to deal is that of a colony of some 1500 or 2000 workmen to be housed round some works, the whole occupying some hundred acres of level ground The soil consists of a foot or so of humus and beneath this a deep layer of dense argillaceous clay The first water bearing level is about 30 feet from the surface, but the water-supply would probably be obtained from a deep boring drawing the water from a second water layer some 300 feet deep. The workmen are chiefly Italians and the system to be adopted must be simple. In another case under very similar circumstances, but in which the workmen were housed in wooden huts that were frequently moved, we adopted a system of shallow pits one set for rubbish and another set over which closets were erected and these pits were frequently drenched with a load of lime and finally refilled with soil, a new pit being excavated a few yards distant. In the present case the workmen will be housed in permanent dwellings and some pail system seems inevitable I am Sirs, yours faithfully

M.D

ICE-CREAMS

To the Editors of THE LANCET

SIRS —The season for the street and seashore "ice-cream" vendor is now here again with us and again are to be seen groups of children investing their coppers and joyously swallowing anything that is handed to them. Will you, Sirs once again say a word for the small ones and urge that everything possible may be done by the authorities to see that the interests of the children are protected and that what is sold to them may be at all events free from any danger to their health? The general appearance of one vendor whom I saw serving a group of hearty little boys suggested awful possibilities to my mind and haunts me, and compels me to write this to you.

I am, Sirs, yours faithfully

NEMO (Surgeon)

THE MICROPHONOGRAPH.

CAN any of our readers inform a correspondent where he can obtain full particulars concerning M. Duasaud's microphonograph?

E. B—The treatment is not one concerning which our readers are likely to have anything complimentary to say It is not founded upon medical principles nor are the homes—which we understand to be as a rule expensive out of all proportion to the attention provided—necessarily under medical charge. The only book we have seen upon this subject was written by a layman

Incisor—The first circular which does not emanate from a medical man, should only have been sent to patients of the deceased, especially in view of the offer to call upon such patients. We do not see why exception should be taken to the second circular

Inquirer will find the information which he seeks in the introductory chapters to Churchill's Medical Directory If he requires to know anything more in detail with respect to any particular service or appointment we will assist him.

X Y Z—The inaugural meeting of the Cancer Society was held on Friday June 9th, Sir Charles Cameron, M.P., presiding We do not know where the offices are.

Inquirer (J H)—The expression is used as our correspondent surmises

T H—The general subject of hair dyes is not strictly a medical one

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METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 15th, 1899.

Date	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp Shade.	Min. Temp	Wet Bulb.	Dry Bulb	Remarks at 8.30 A.M.
June 9	30 39	E		110	68	50	48	53	Cloudy
" 10	30 31	E		113	71	52	50	55	Cloudy
" 11	30 24	E		114	73	52	51	55	Cloudy
" 12	30 15	S W	"	116	78	53	56	59	Hazy
" 13	30 09	N E		106	74	54	53	57	Cloudy
" 14	29·95	N E		94	69	47	48	53	Cloudy
" 15	30 12	N E		110	71	47	51	57	Fine

The Croonian Lectures

OF

SOME POINTS CONNECTED WITH SLEEP, SLEEPLESSNESS, AND HYPNOTICS

Delivered before the Royal College of Physicians of London

BY JOHN BUCKLEY BRADBURY,
M D CANTAB,
FELLOW OF THE COLLEGE DOWNING PROFESSOR OF MEDICINE IN THE UNIVERSITY OF CAMBRIDGE AND SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

LECTURE I [1]

Delivered on June 20th, 1899

MR. PRESIDENT AND GENTLEMEN,—When the late President did me the great honour of asking me to deliver the Croonian Lectures for 1899 I felt some diffidence in accepting the invitation, but on thinking the matter over it occurred to me that some points connected with sleep, sleeplessness, and hypnotics which had engaged my attention might possibly be of sufficient interest to bring before the College. Let me therefore thank the College for the trust which was entrusted to me and ask you to consider with me in the first place

THE PHYSIOLOGY OF SLEEP

Notwithstanding the brilliant and laborious researches of physiologists and neurologists during recent years the phenomenon of sleep is still enveloped in mystery and its study is surrounded with innumerable difficulties For a long time sleep has been viewed from two standpoints—the physiological and the psychological—and although an attempt to combine the two is sometimes observed they have remained essentially distinct to the present day It is of necessity so for notwithstanding the great development of physiological psychology little has yet been done to bridge over the great gulf between the two sciences It is true that psychologists of the new school are endeavouring to place psychology upon a physiological basis and to correlate psychical processes discoverable by internal perception with physical changes That every psychical process is accompanied by some physical change seems to be self evident, but the nature of this change and its connexion with different mental states are problems difficult to solve For the present we must be content to regard the relation between the two as one of parallelism The units of the two sciences are not at present comparable As Mercier says "We can no more think of mind and matter in convertible terms than we can imagine a particle of iron to become transformed into a feeling of anger or the revolution of a wheel to become the remembrance of a date of a battle" But as physiology and psychology have joined hands this question of correlation may possibly be solved and the solution is necessary for a true conception of the phenomenon of sleep

On the basis of recent discoveries in the physiology and more particularly in the histology of the nervous system various theories of the causation of sleep have been advanced but before we can consider these in detail it is necessary to review our present conception of the central nervous system The view now current is based upon Waldeyer's idea of a nervous system made up of independent elements—neurons and other cells—intimately interwoven and complexly arranged Each neuron consists of a cell body with branching processes (dendrons *or* dendrites, or, according to Sir William Gowers, dendrons *and* dendrites) and an axis cylinder process (axon *or* axite) The dendrons spring from various parts of the cell body and divide and subdivide until extremely fine terminal processes (dendrites) are reached which end apparently freely in a homogeneous matrix In many cases upon the dendrites short lateral offshoots termed "gemmules" or "thorns," may be seen and occasionally, especially in the young, nodosities may also be noted. The axon contrary to former belief, is known to give off branches or collaterals which again subdivide among the dendritic processes of other cells or form a network around their bodies In no case, however, is direct continuity believed to exist between these The dendritic processes of one cell are separated from the dendritic processes or collateral branches of another by an intercalated material Each neuron, in other words, is a unit possessing an independent existence, and as such is comparable to the cells forming other organs of the body The supposed mode of combination of the various nerve-cells is well seen in this diagram (Fig 1), taken from Ramon y Cajal's Croonian Lecture before the Royal Society in 1894, and it gives us a better idea of the supposed inter connexions than can any verbal description The neurons, as might be expected, vary in the different parts of the brain and cord both in regard to the size, form, and intimate structure of the cell body and to the form and branching of its processes But as our immediate purpose is rather with the function than with the size and form of the cell it will be unnecessary to enter in great detail into a consideration of the latter The anatomical features connected with the function of the cell are alone of interest and latterly these have received considerable attention As regards the body it is said that the fibrils of the axon process can be traced in some cells into the dendrons, and it has been stated that the function of the cell body in such cases is purely nutritive Generally in the cell body a granular formation more or less definitely arranged is observed, the granules around the nucleus being more or less spherical and those at the periphery more elongated These granules are believed to be connected with the functional activity of the cell, they disappear, for example, from the cells of the cervical ganglion after long continued electrical stimulation (Vas, Lambert, and Hodge), and the cells of the cerebral cortex, even when affected by ordinary stimuli, show a diminution in their staining power when compared with unstimulated cells (Mann Lugaro, and Demoor) Changes in the form and volume of the cell have also been described With moderate activity turgescence of the cell and nucleus and accumulation of chromatin particles occur and after prolonged work shrinking of the protoplasm and irregularities in the contour of the cell and the nucleus are observed Other changes have been found, but those which I have mentioned are sufficient to indicate that the cell body is the seat of demonstrable alterations during activity

All the physiologists who accept Waldeyer's view believe that the transmission of nerve impulses occurs through the intercalated material between the terminal cell processes, but as some doubt has been thrown on the isolated character of the neurons it will be necessary to inquire into this point further Our present conception of the nervous system is due almost entirely to investigations with Golgi's silver method, and in this connexion Dr Alex Hill in his Presidential Address before the Neurological Society of London in 1896, summarised the objections against the method thus "1 The deposit is liable to spread beyond the limits of the elements which chiefly attract it In some cases it stains not the cell or the fibre but the wall of the lymphatic space which surrounds it 2. The amount and character of the reaction depend upon the texture of the tissue in which it occurs It is therefore liable to stop short at the edge of a favourable zone, giving an incomplete picture of the elements which it colours 3 (*a*) It never takes all the elements of any one kind, (*b*) it seldom shows heterologous elements in the same section with sufficient completeness to enable us to trace their connexions, (*c*) it does not stain the whole of the substance which belongs to a cell or a fibre but only part, and this apparently the neuroplasmic not the conducting part" (p 20) Dr Hill then proceeds to criticise under these various heads the present accepted views He throws considerable doubt on the terminal character of axons and their collaterals which form the "basket work" around Purkinje's cells and which Ramón y Cajal describes and believes to be concerned in the transmission of nervous impulses to the cell But the most important contention of Dr Hill is the unfairness of concluding from so coarse a method that the isolation of the nerve elements is complete The theory just mentioned that nerve-fibres end freely in contiguity with the bodies of nerve-cells he says, is completely subversive of all existing notions of nerve conduction (p 25) He then summarises the Gerlachian theory and states that the essential difference between Gerlach's and the modern view (the view of Retzius Ramon y Cajal, Kölliker van Gehuchten, and many others) turns upon this *Is the*

[1] Lecture II was delivered on June 22nd, and Lectures III and IV will be delivered on June 27th and 28th respectively

Communications, Letters, &c., have been received from—

A.—Dr A. R. Aldridge Cherat; Article Club Lond., Secretary of Mons J Astier, Paris; Messrs. Allen and Hanburys, Lond., Mons. F Alcan, Paris; Ancoats Hospital, Manchester, Secretary of Dr J Aikman, Guernsey

B.—Mons. O Berthier Paris Mr C A. G Browne, Lond.; Messrs. Bates, Hendy and Co., Reading Bradford Royal Infirmary Secretary of; T B. Browne, Ltd Lond.; Mr A. E Barker, Lond. Borough Hospital, Birkenhead Secretary of; Borough of Burton on Trent, Town Clerk of; Messrs. H. Booth and Sons, Oldham Birmingham Faculty of Medicine, Dean of Messrs. Burgoyne, Burbidges, and Co, Lond.

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D—Dr K. Das, Calcutta Messrs. Davy, Hill, and Son, Lond; Derbyshire Royal Infirmary Derby, Secretary of

E.—Messrs. Eason and Son, Dublin.

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J—Dr N B. Jenkins, Knoxville, U S A.; J S

K.—Dr R. Kirk, Partick; King Arthur's Castle Hotel Co., Tintagel; Kidderminster Medical Society, Secretary of Dr J M. M. Kerr Glasgow

L.—Dr E. S. Lee, Lucerne Liverpool Northern Hospital Secretary of Lancaster Union, Clerk of London Throat Hospital, Hon. Secretary of London Gersap Co., Lond.

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T—Dr G Thornton, Lond. Dr H. E. Thompson Birmingham.

V—Mr J W Vickers, Lond.

W—Mr W G Wardrop, Ballarat Mr P M. Wood Ashfield New South Wales, Mr A. Watts, Lond. Mr E. Dudley Ward, Lond.; Messrs. Wright, Laymen and Umney, Lond. Dr J S Walker, Hanley Wade Disinfectant Syndicate Lond. Herr Winckler, Friednau W C. West Bromwich District Hospital, Secretary of Messrs. J Wright and Co., Bristol; Dr A. F Wilson, Folkestone; J Willing Ltd., Lond. Mrs. Williams, Poole.

X.—X., Leeds.

Letters, each with enclosure, are also acknowledged from—

A.—Mr J R. Anderton, New Mills Mr F W Alexander Lond. A. C A. C F Mr F C Allen, Dudley; A. K. I Mr J V Arkle Dunedin New Zealand.

B.—Dr G G Bothwell, Hull; Mr C Birchall Liverpool Sir Hugh Beevor, Bart. Lond. Borough Asylum, Portsmouth.

C.—Mr W H Clark, Newbridge Messrs. A. Cohen and Co. Lond. Mrs. Carter, Eastbourne Mr C. A. Colmer, Weymouth, Mr F E Croft, Bournemouth; C R. G B; C W W; Cambridge University (Pathological Department).

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F—Mr D Fisher, Lond.; Mr C L. Fraser, Berwick-on Tweed Mr F E. Forward Beeston F R. F S E Fisherton Asylum Salisbury Medical Superintendent of

G.—G M. M

H.—Mr W H. Haw, Barberton, South African Republic Dr F Hawkins, Reading Dr T Harris, Manchester; Dr J Hamilton, Swadlincote Messrs. J Haddon and Co, Lond.; Mr A. J Hull Colsterworth H. K. R.

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J—Dr H. R. Jones, Liverpool Messrs. Jackson and Jackson, Devizes J W D J H; J R. J M. T J Mc K. J M., Dr D M. Jones, Aldershot; J G J T H.

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N—Northern Medical Association, Glasgow Mr L. Nicholls, Hartest

P—Dr W H Packer Cressage Messrs. C Pool and Co., Lond.; Mr E. P Pentony, Middlesbrough Messrs. Proctor, Son and Clague Newcastle-on-Tyne Miss M Prower Lond.

R.—Rochford Union, Southend-on-Sea, Secretary of, Dr E. W Roughton, Lond.

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T—Mr J Thin, Edinburgh; T Mc C. Messrs. J Turner and Co., Queen's Ferry T H. W

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Y—Dr R. J E. Young, Edinburgh.

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The Croonian Lectures

ON

SOME POINTS CONNECTED WITH SLEEP, SLEEPLESSNESS, AND HYPNOTICS

Delivered before the Royal College of Physicians of London

BY JOHN BUCKLEY BRADBURY,
M D CANTAB,
FELLOW OF THE COLLEGE DOWNING PROFESSOR OF MEDICINE IN THE UNIVERSITY OF CAMBRIDGE AND SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL

LECTURE I [1]

Delivered on June 5th 1899

PRESIDENT AND GENTLEMEN,—When the late ent did me the great honour of asking me to deliver roonian Lectures for 1899 I felt some diffidence in ing the invitation, but on thinking the matter over it ed to me that some points connected with sleep, essness, and hypnotics which had engaged my atten night possibly be of sufficient interest to bring before College. Let me therefore thank the College for the which was entrusted to me and ask you to consider me in the first place

THE PHYSIOLOGY OF SLEEP

withstanding the brilliant and laborious researches of ologists and neurologists during recent years the phenon of sleep is still enveloped in mystery and its study is rounded with innumerable difficulties For a long time p has been viewed from two standpoints—the physio cal and the psychological—and although an attempt mbine the two is sometimes observed they have remained entirely distinct to the present day It is of necessity so notwithstanding the great development of physiological psychology little has yet been done to bridge over the great lf between the two sciences It is true that psychologists the new school are endeavouring to place psychology upon physiological basis and to correlate psychical processes dis verable by internal perception with physical changes That ery psychical process is accompanied by some physical ange seems to be self evident, but the nature of this change d its connexion with different mental states are problems difficult to solve For the present we must be content to gard the relation between the two as one of parallelism he units of the two sciences are not at present comparable s Mercier says "We can no more think of mind and nger in convertible terms than we can imagine a particle of iron to become transformed into a feeling of anger or the revolution of a wheel to become the remembrance of a date of a battle." But as physiology and psychology have joined hands this question of correlation may possibly be solved and the solution is necessary for a true conception of the phenomenon of sleep

On the basis of recent discoveries in the physiology and more particularly in the histology of the nervous system various theories of the causation of sleep have been advanced but before we can consider these in detail it is necessary to review our present conception of the central nervous system The view now current is based upon Waldeyer's idea of a nervous system made up of independent elements—neurons and other cells—intimately interwoven and com plexly arranged Each neuron consists of a cell-body with branching processes (dendrons *or* dendrites, or according to Sir William Gowers, dendrons *and* dendrites) and an axis-cylinder process (axon *or* axite) The dendrons spring from various parts of the cell body and divide and subdivide until extremely fine terminal processes (dendrites) are reached which end apparently freely in a homogeneous matrix In many cases upon the dendrites short lateral offshoots, termed "gemmules" or "thorns" may be seen and occasionally, especially in the young nodosities may also be noted. The axon contrary to former belief is known to give off branches or collaterals which again subdivide among the dendritic processes of other cells or form a network around their bodies In no case, however, is direct continuity believed to exist between these The dendritic processes of one cell are separated from the dendritic processes or collateral branches of another by an intercalated material Each neuron, in other words, is a unit possessing an independent existence, and as such is comparable to the cells forming other organs of the body The supposed mode of combination of the various nerve-cells is well seen in this diagram (Fig 1) taken from Ramon y Cajal's Croonian Lecture before the Royal Society in 1894, and it gives us a better idea of the supposed inter-connexions than can any verbal description The neurons, as might be expected, vary in the different parts of the brain and cord both in regard to the size, form, and intimate structure of the cell body and to the form and branching of its processes But as our immediate purpose is rather with the function than with the size and form of the cell it will be unnecessary to enter in great detail into a consideration of the latter The anatomical features connected with the function of the cell are alone of interest and latterly these have received considerable attention As regards the body it is said that the fibrils o the axon process can be traced in some cells into the dendrons, and it has been stated that the function of the cell body in such cases is purely nutritive Generally in the cell body a granular formation more or less definitely arranged is observed, the granules around the nucleus being more or less spherical and those at the periphery more elongated These granules are believed to be connected with the functional activity of the cell, they disappear, for example, from the cells of the cervical ganglion after long continued electrical stimulation (Vas, Lambert, and Hodge), and the cells of the cerebral cortex, even when affected by ordinary stimuli, show a diminution in their staining power when compared with unstimulated cells (Mann, Lugaro, and Demoor) Changes in the form and volume of the cell have also been described With moderate activity turgescence of the cell and nucleus and accumulation of chromatin particles occur and after prolonged work shrinking of the protoplasm and irregularities in the contour of the cell and the nucleus are observed Other changes have been found, but those which I have mentioned are sufficient to indicate that the cell body is the seat of demonstrable alterations during activity

All the physiologists who accept Waldeyer's view believe that the transmission of nerve impulses occurs through the intercalated material between the terminal cell processes, but as some doubt has been thrown on the isolated character of the neurons it will be necessary to inquire into this point further Our present conception of the nervous system is due almost entirely to investigations with Golgi's silver method, and in this connexion Dr Alex Hill, in his Presidential Address before the Neurological Society of London in 1896, summarised the objections against the method thus "1 The deposit is liable to spread beyond the limits of the elements which chiefly attract it In some cases it stains not the cell or the fibre but the wall of the lymphatic space which surrounds it 2 The amount and character of the reaction depend upon the texture of the tissue in which it occurs It is therefore liable to stop short at the edge of a favourable zone, giving an incomplete picture of the elements which it colours 3 (*a*) It never takes all the elements of any one kind, (*b*) it seldom shows heterologous elements in the same section with sufficient completeness to enable us to trace their connexions, (*c*) it does not stain the whole of the substance which belongs to a cell or a fibre but only part, and this apparently the neuroplasmic not the conducting part" (p 20) Dr Hill then proceeds to criticise under these various heads the present accepted views He throws considerable doubt on the terminal character of axons and their collaterals which form the "basket work" around Purkinje's cells and which Ramón y Cajal describes and believes to be concerned in the transmission of nervous impulses to the cell But the most important contention of Dr Hill is the unfairness of concluding from so coarse a method that the isolation of the nerve elements is complete The theory just mentioned that nerve fibres end freely in contiguity with the bodies of nerve-cells he says, is completely subversive of all existing notions of nerve conduction (p 25) He then summarises the Gerlachian theory and states that the essential difference between Gerlach's and the modern view (the view of Retzius Ramón y Cajal, Kölliker van Gehuchten, and many others) turns upon this *Is the*

[1] Lecture II was delivered on June 22nd, and Lectures III. and IV will be delivered on June 27th and 29th respectively

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comparison to the action of curare as irrelevant. Widers m did not observe movement in the processes of the cells, l in the transparent parts of living animals (the larva of rachians, the head of the amphioxus, &c.), where nerve minations have been observed, no movement has been ceived. Moreover, he thinks that if amœboid movements ur physical conditions would tend to act in a constant nner and the same mental states under varying conditions uld be impossible. Furthermore, he says that "it cannot doubted that the essential function of the nervous system—, psychical processes—is bound up with the nerve cells." many of his criticisms he seems to me to lay too much ress upon the stability of the axis-cylinder process. The ructure of this can hardly be compared with that of the ore delicate dendritic processes, and stimuli without fluence on the former might powerfully affect the latter. t the termination of his paper he expounds his theory of sychical conditions which although it is necessary to mention one with which we have long been familiar. The essential ictors of mental activity—sensibility, consciousness, will, c.—he says are the nerve cells with their neuro-dendritic rocesses. These are affected by centripetal stimuli and in urn, through their processes, they act centrifugally on other notor, sensory, or psychical elements. Sometimes the athway is simple sometimes extremely complex, and in the atter case the degree of mental gymnastics to which the ndividual has been subjected is of considerable importance is facilitating the transmission along unusual combinations. He is thus an advocate of the view that facility in thought and action is due to diminished resistance in the pathways, but in what way this occurs he does not state.

Ramón y Cajal strengthens Kölliker's objections by the following: 1. The nerve terminations of the cerebellum, the olfactory bulb, the central auditory ganglion, and the optic lobe constantly show the same extension, form, and degree of approximation to the cell bodies, whatever may have been the mode of death of the animal (from hæmorrhage, chloroform, curare or strychnine, &c.). 2. The nerve terminations of the retina and optic lobule of reptiles and batrachians (the only animals on which he experimented) show the same condition, whether the organ was hardened after continued rest, as after long retention in the dark, or after activity, as when it had been kept several hours in the sun. He therefore believes that the axites and dendrites possess a constant disposition. But in order to explain sleep and other psychical phenomena he brings in another factor. Under different conditions he found the processes of the neuroglial cells contracted or expanded and he suggests that a function of these cells is to act as an isolating medium between the neurons. During sleep the neuroglial processes are introduced between the nerve ramifications and the cells or their protoplasmic processes, in consequence of which the passage of impulses is prevented or hindered. Apart from the seat of operation, Ramón y Cajal's theory differs from Duval's in that the processes (neuroglial in the case of Ramon y Cajal) are expanded when the brain is at rest and are contracted when in action. The contraction is usually automatic, but may be brought about by the action of the will. I do not, however, propose to follow Ramón y Cajal in his explanation of psychological phenomena on this theory, especially as his observations have not been confirmed by more recent investigators. His theory seems to me to endow the neuroglial cells with more nervous activity than they are capable of and to allot to them a function which, from their position and structure, I venture to think cannot be maintained. Moreover, if we accept the network theory of Boll, Hill, and others or Berkley's or Lugaro's modification of the usually accepted view, this explanation loses nearly all its significance.

Before leaving the histological theories of sleep I will briefly refer to a view recently advanced by Gotch to explain the conditions of hypnotism. He goes further than Duval in attributing a major influence to the periphery of the neuron, for he believes that the gaps between the terminations of the adjoining dendritic processes are of primary importance in the transmission of nerve impulses. These gaps determine whether an impulse shall pass or not, once it has passed. Gotch believes nothing can hinder its further course. The gaps are capable of variation, in fact, he states that "the whole of modern physiology is inexplicable except on the supposition that the gaps are susceptible of alteration. What this alteration is we do not know, the gap consists of living tissue and, like all living structures, is constantly undergoing molecular change." The resistance of the gap varies with different conditions, thus the [illegible] of the higher nerve centres increases the resistance; the force of habit or practice diminishes it, constant attention leads to fatigue changes in the intercalated material, and the forcing of the gaps is then "a concomitant of the mental mood of volitional attention." Although this theory is primarily advanced to explain hypnotic phenomena it is evident that a similar explanation might be advanced to account for sleep. It does not seem quite clear to me whether the resistance is due to a molecular rearrangement of the intercalated material or to an increase of its amount between the dendrites. If the latter, as is suggested in one place, the conditions simulate those advanced by Rabl-Rückhard, Lépine, and Duval. Gotch's theory differs from theirs in attributing a greater influence to the gaps than to the protoplasmic processes. Like its allies it must consequently stand or fall with the proof or disproof of the neuronic conception of the nervous system. To me it seems to attribute much too active a function to what one has always been taught to regard as a passive structure, but past teachings must avail little if the present ones are sufficiently convincing to me they are not.

The most recent theory has been advanced by Lugaro. According to him unconsciousness is not due to a retraction of the terminal dendritic processes but to an expansion. As I have already said, he believes that nerve impulses pass through the gemmules and that the passage is facilitated or inhibited by the closer or remoter relation of these to each other. During ordinary thought but few of these are in contiguity, the others are retracted. The latter are in a potential state—that is, they are capable of being approximated by any suitable stimulus. Lugaro's theory differs from that of Lépine and Duval in that expansion of the gemmules is regarded as the resting phase and contraction as the active one. Thus in sleep the gemmules are believed to be expanded, the paths for impulses are thus enormously increased, and this leads to confusion of thought and loss of consciousness.

In the unsettled state of the views of neurologists on the structure of the nervous system it would be impertinent to criticise these histological theories in detail. Further research alone can settle the present conflicting opinions, and on the result of this depends the probability or possibility of the minute changes which we have considered affording an explanation of psychical phenomena.

The *vaso-motor theory* of sleep is almost as popular as the histological theories which we have considered; and interest in it has recently been awakened by the experiments of Professor Howell of the Johns Hopkins University. It has, however, been a favourite theory for many years. Based upon direct observation of the cerebral cortex by Donders, Durham, Hammond, and others, and on the plethysmographic researches of Mosso it seemed to possess a firm foundation, but of late this has been rudely shaken. The conditions of experimentation in these researches were not normal and further investigations have shown the necessity of modifying our views on the matter. Thus Dr. Leonard Hill has proved that practically no change occurs in the cranial contents, that the brain at nearly all points is in contact with the cranial wall, and that the amount of cerebro-spinal fluid in the intact cavity is very small and incapable of gravitating to any appreciable extent into the spinal canal. Moreover, he has shown that the cerebro-spinal pressure equals the venous pressure, that it does not rise beyond it, and that the cerebro-spinal fluid does not normally function as a compensating mechanism for alterations in the cranial contents. "The volume of the blood in the brain," he says, "is in all physiological conditions but slightly variable." Therefore, cerebral anæmia, if we regard this as a diminution in the total quantity of blood in the brain, cannot exist to any extent. It is possible for an arterial anæmia combined with venous congestion to occur and Dr. Hughlings Jackson's observations on the retinal vessels during sleep would render this not improbable. In view of Dr. Leonard Hill's researches it seems absolutely necessary to recognise the Munro-Kellie doctrine (the incompressibility of the brain and constant volume of the cerebral contents) in dealing with the causal factors of sleep. Cappie on purely theoretical grounds advocated this doctrine and advanced a theory of sleep in harmony with it. The main feature of his view is that the arterial anæmia of the brain is compensated by a filling of the pial vessels and an alteration of the normal pressure on the cerebral surface from an expansive to a compressive force.

Since Dr. Leonard Hill's investigations Professor Howell

this view the transmission of nervous impulses presents no obstacle Another theory of the function of these gemmules and the transmission of impulses has been put forward by Berkley. He accepts the knob like terminations of the gemmules as natural, but he cannot accept Ramón y Cajal's theory that nervous forces may discharge themselves from axites to dendrites all along the line The dendrites he believes, are covered with a thin enveloping sheath through which the gemmules penetrate, and it is only at the tip of the gemmules that naked protoplasm exists Similarly the fine branches of the axites are covered with "a protective sheath of great tenuity" and only exhibit naked protoplasm at their bulbous terminations Therefore Berkley believes that it is only between these free terminations that nerve impulses can pass The mode of branching of the axites varies according as they form ascending fibres (extrinsic) or belong to local cells (intrinsic) The extrinsic break up into a number of filaments, usually at some distance from one another, which re-divide into a small number of others These course over a short extent of territory and terminate in flattened or globular extremities, the number seldom exceeding six or eight (Fig 2)

The terminations from the collaterals of the psychical cells show a very different disposition Winding among the dendrites of the cells and often closely applied to them they seldom show any definite endings until the mid portion of the layer of small pyramidal cells is reached There they split up into a number of exceedingly fine branches, which frequently run parallel with the course pursued by the apical and basal dendrites They eventually give off at frequent intervals exceedingly short collaterals, usually from the side nearest to the dendrites, which terminate in a round or flattened bulb like extremity similar to those on the branches of the ascending fibres These are closely applied to the bulbous tip of the gemmules, the appearance often suggesting one of actual contact, the axonal discharges of the stimuli overleaping the infinitesimal distance between the bulb and gemmule (Fig 1) "The interpretation of the objective existence of the terminal apparatus of the nerve fibres," Berkley says, "cannot be made but in one way—namely, that the impressions conveyed from external sources to central cell and from local cell to local cell are not accomplished by a diffusion of the excitation through the whole cortex, or even at various points along the course of the finer branches of the axons, but at single points perfectly definite in their distribution, and that these points are situated only at the extremities of the nerve-fibre twigs, in the form of an histologically exact formation—the bulbous ending of the nerve fibre—which in itself constitutes the sole and only means for the carrying over of the cellular forces from axon to dendron and from cell to cell, and is in entire conformity with the conception of Waldeyer of the entity of the neuron, each cell standing as a unit in the nervous formation and only in continuity with others at definite points" In a still more recent communication Lugaro also states that the transmission of impulses occurs through the extremity of the gemmules These he believes are capable of expansion and retraction to a slight degree, and upon this function he bases his theory, which I shall presently allude to, of psychical processes A form of nerve termination in the central nervous system has been described by Aldren Turner and Hunter in the Spring number of *Brain* for 1899, but so far this has not been utilised to explain sleep After injecting methylene-blue into the circulation during life they found after death a fine lattice-work arrangement over the cells in most parts of the brain This was most marked over the root of the axis cylinder process and according to these authors it is the termination of the axis cylinder of another cell There is no continuity of tissue and therefore the entity of the neuron is not questioned Nerve impulses are believed to pass from the network to the cell body and not from terminal axite to dendrite, or *vice versa* The function of the dendritic processes, the authors are inclined to believe, is nutritive—a theory first suggested by Golgi

After this brief survey of the place of the neuron in nerve-physiology we shall be better able to understand some of the theories which have been put forward to explain sleep But before dealing with these it will be well to review the facts which it is necessary to explain Speaking generally, during sleep the whole metabolism of the body is depressed The respirations are shallower, the aeration of the blood is less active, the pulse is less frequent, the blood pressure is lower and the temperature tends to fall, the nervous system is so affected that sense stimuli of moderate intensity are not perceived, and consciousness is in abeyance, but reflex effects can still be obtained These phenomena are not constant during the sleeping state, but vary within fairly wide limits On this account some of them have been credited with an etiological rôle, and this leads us on to the

THEORIES OF SLEEP

Those advanced up to the present time may be divided into chemical, histological, vaso-motorial, and psychological These theories are not necessarily antagonistic, as we shall presently see, but their promulgators differ in their mode of explanation and in the prominence which they give to an individual character Let us first consider the cause of sleep in the abstract

It is evident that consciousness, whatever this may be, is due to a certain definite condition of the nerve-cells or neurons and any departure from complete consciousness must be due to some change from this state At the present time it is difficult to come to any other conclusion than that this state and its alterations are of a chemical nature—that consciousness is accompanied by, if not due to, a normal metabolism of the nervous cells, and unconsciousness or diminished consciousness to a chemical alteration in this metabolism This so-called normal metabolism is the result not merely of the vital requirements of the cells but of this *plus* the alterations produced by the inflow of stimuli Diminish the stimuli or make them constant both as to kind and intensity (monotony) and the metabolism may become constant though in changed conditions, a kind of rapid acclimatisation occurs, and with it diminished consciousness The same effect might be produced by the alteration of metabolism due to the application of a poison. It seems to me that the fundamental phenomena to be determined in dealing with psychical processes are the chemical changes occurring in the cells, molecular vibration and processes of a similar nature which have been speculated upon from time to time are, with our present knowledge, in the realms of the unknown Even if they can be known it seems more philosophical to determine the gross chemical changes first, although there is not much likelihood of these being actually demonstrated in the near future Admitting that chemical alterations are the causes or proportional concomitants of states of consciousness we shall be able to trace a connexion in some of the various theories of sleep which have been propounded Thus, it is very evident that the metabolism of the cerebral cell may be and probably will be altered by, changed extrinsic conditions—e g, by the blood supply—and that it may produce gross physical changes in the cell—e.g, retraction of the protoplasmic processes The vaso motorial and histological and in part the chemical theories are—or perhaps it would be better to say may be—thus brought into connexion But let us examine the theories in detail

The most fascinating of them all is what Duval has termed the *histological theory* of sleep This seems to have been propounded in its most rudimentary state by Rabl Rückhard who suggested that an assumed amœboid motion of the neurons, and especially the dendritic processes, would account for various psychological phenomena Thus sleep might be explained by a retraction of these processes and consequent inability of nervous impulses to pass from one neuron to another The same theory was elaborated independently by Lépine and Duval Lépine thinks this isolation of the individual neurons may be due to some chemical modification of the cellular protoplasm and he also states that the theory explains the extraordinary suddenness with which a state of wakefulness passes into one of sleep Duval goes so far as to explain the action of medicaments on this theory and he draws comparisons between the action of drugs on the terminal dendritic processes and the effect of curare on motor nerve endings. This is surely hypothetical Moreover, he seems to ignore the body of the cell itself, everything is referred to the dendritic terminations It is most unnecessary to point out that the theory of Rabl Rückhard, Lépine, and Duval is dependent upon the conception of isolated neurons as independent units in the composition of the nervous system and that with the disproof of this conception their theory must fall to the ground Kölliker has strongly criticised this (the amœboid movement) theory He says that Widersheim's observations on the movements occurring in the nerve cells of the supra œsophageal ganglion of *leptodora hyalina* are not pertinent to the question, and he rejects

the comparison to the action of curare as irrelevant Wideren heim did not observe movement in the processes of the cells, and in the transparent parts of living animals (the larva of batrachians, the head of the amphioxus, &c), where nerve terminations have been observed, no movement has been perceived. Moreover, he thinks that if amœboid movements occur physical conditions would tend to act in a constant manner and the same mental states under varying conditions would be impossible. Furthermore, he says that "it cannot be doubted that the essential function of the nervous system—i.e., psychical processes—is bound up with the nerve cells" In many of his criticisms he seems to me to lay too much stress upon the stability of the axis-cylinder process The structure of this can hardly be compared with that of the more delicate dendritic processes, and stimuli without influence on the former might powerfully affect the latter At the termination of his paper he expounds his theory of psychical conditions which although it is necessary to mention is one with which we have long been familiar The essential factors of mental activity—sensibility, consciousness, will, &c.—he says are the nerve cells with their neuro-dendritic processes These are affected by centripetal stimuli and in turn, through their processes, they act centrifugally on other motor, sensory, or psychical elements Sometimes the pathway is simple, sometimes extremely complex, and in the latter case the degree of mental gymnastics to which the individual has been subjected is of considerable importance as facilitating the transmission along unusual combinations He is thus an advocate of the view that facility in thought and action is due to diminished resistance in the pathways, but in what way this occurs he does not state

Ramón y Cajal strengthens Kölliker's objections by the following 1 The nerve terminations of the cerebellum, the olfactory bulb, the central auditory ganglion, and the optic lobe constantly show the same extension, form, and degree of approximation to the cell bodies, whatever may have been the mode of death of the animal (from hæmorrhage chloroform curare or strychnine, &c) 2. The nerve terminations of the retina and optic lobule of reptiles and batrachians (the only animals on which he experimented) show the same condition, whether the organ was hardened after continued rest as after long retention in the dark, or after activity, as when it had been kept several hours in the sun. He therefore believes that the axites and dendrites possess a constant disposition But in order to explain sleep and other psychical phenomena he brings in another factor Under different conditions he found the processes of the neuroglial cells contracted or expanded and he suggests that a function of these cells is to act as an isolating medium between the neurons - During sleep the neuroglial processes are introduced between the nerve ramifications and the cells or their protoplasmic processes, in consequence of which the passage of impulses is prevented or hindered. Apart from the seat of operation Ramón y Cajal's theory differs from Duval's in that the processes (neuroglial in the case of Ramon y Cajal) are expanded when the brain is at rest and are contracted when in action The contraction is usually automatic, but may be brought about by the action of the will I do not, however, propose to follow Ramón y Cajal in his explanation of psychological phenomena on this theory, especially as his observations have not been confirmed by more recent investigators His theory seems to me to endow the neuroglial cells with more nervous activity than they are capable of and to allot to them a function which, from their position and structure, I venture to think cannot be maintained. Moreover, if we accept the network theory of Boll, Hill, and others, or Berkley's or Lugaro's modification of the usually accepted view, this explanation loses nearly all its significance

Before leaving the histological theories of sleep I will briefly refer to a view recently advanced by Gotch to explain the conditions of hypnotism He goes further than Duval in attributing a major influence to the periphery of the neuron, for he believes that the gaps between the terminations of the adjoining dendritic processes are of primary importance in the transmission of nerve impulses These gaps determine whether an impulse shall pass or not, once it has passed Gotch believes nothing can hinder its further course The gaps are capable of variation, in fact, he states that "the whole of modern physiology is inexplicable except on the supposition that the gaps are susceptible of alteration. What this alteration is we do not know, the gap consists of living tissue and, like all living structures, is constantly undergoing molecular change" The resistance of the gap varies with different conditions, thus the action of the higher nerve centres increases the resistance, the force of habit or practice diminishes it; constant attention leads to fatigue-changes in the intercalated material, and the forcing of the gaps is then "a concomitant of the mental mood of volitional attention" Although this theory is primarily advanced to explain hypnotic phenomena it is evident that a similar explanation might be advanced to account for sleep It does not seem quite clear to me whether the resistance is due to a molecular rearrangement of the intercalated material or to an increase of its amount between the dendrites If the latter, as is suggested in one place, the conditions simulate those advanced by Rahl-Rückhard, Lepine, and Duval - Gotch's theory differs from theirs in attributing a greater influence to the gaps than to the protoplasmic processes Like its allies it must consequently stand or fall with the proof or disproof of the neuronic conception of the nervous system To me it seems to attribute much too active a function to what one has always been taught to regard as a passive structure, but past teachings must avail little if the present ones are sufficiently convincing to me they are not

The most recent theory has been advanced by Lugaro. According to him unconsciousness is not due to a retraction of the terminal dendritic processes but to an expansion As I have already said he believes that nerve impulses pass through the gemmules and that the passage is facilitated or inhibited by the closer or remoter relation of these to each other During ordinary thought but few of these are in contiguity, the others are retracted The latter are in a potential state—that is, they are capable of being approximated by any suitable stimulus Lugaro's theory differs from that of Lépine and Duval in that expansion of the gemmules is regarded as the resting phase and contraction as the active one Thus in sleep the gemmules are believed to be expanded, the paths for impulses are thus enormously increased, and this leads to confusion of thought and loss of consciousness

In the unsettled state of the views of neurologists on the structure of the nervous system it would be impertinent to criticise these histological theories in detail Further research alone can settle the present conflicting opinions, and on the result of this depends the probability or possibility of the minute changes which we have considered affording an explanation of psychical phenomena

The *vaso-motor theory* of sleep is almost as popular as the histological theories which we have considered, and interest in it has recently been awakened by the experiments of Professor Howell of the Johns Hopkins University It has, however, been a favourite theory for many years. Based upon direct observation of the cerebral cortex by Donders, Durham, Hammond and others, and on the plethysmographic researches of Mosso, it seemed to possess a firm foundation, but of late this has been rudely shaken The conditions of experimentation in these researches were not normal and further investigations have shown the necessity of modifying our views on the matter. Thus Dr Leonard Hill has proved that practically no change occurs in the cranial contents, that the brain at nearly all points is in contact with the cranial wall, and that the amount of cerebro-spinal fluid in the intact cavity is very small and incapable of gravitating to any appreciable extent into the spinal canal. Moreover, he has shown that the cerebro-spinal pressure equals the venous pressure, that it does not rise beyond it, and that the cerebro-spinal fluid does not normally function as a compensating mechanism for alterations in the cranial contents "The volume of the blood in the brain," he says, "is in all physiological conditions but slightly variable Therefore, cerebral anæmia, if we regard this as a diminution in the total quantity of blood in the brain, cannot exist to any extent It is possible for an arterial anæmia combined with venous congestion to occur and Dr Hughlings Jackson's observations on the retinal vessels during sleep would render this not improbable. In view of Dr Leonard Hill's researches it seems absolutely necessary to recognise the Munro-Kellie doctrine (the incompressibility of the brain and constant volume of the cerebral contents) in dealing with the causal factors of sleep. Cappie on purely theoretical grounds advocated this doctrine and advanced a theory of sleep in harmony with it The main feature of his view is that the arterial anæmia of the brain is compensated by a filling of the pial vessels and an alteration of the normal pressure on the cerebral surface from an expansive to a compressive force

Since Dr Leonard Hill's investigations Professor Howell

this view the transmission of nervous impulses presents no obstacle Another theory of the function of these gemmules and the transmission of impulses has been put forward by Berkley He accepts the knob-like terminations of the gemmules as natural, but he cannot accept Ramón y Cajal's theory that nervous forces may discharge themselves from axites to dendrites all along the line The dendrites he believes, are covered with a thin enveloping sheath through which the gemmules penetrate, and it is only at the tip of the gemmules that naked protoplasm exists Similarly the fine branches of the axites are covered with "a protective sheath of great tenuity" and only exhibit naked protoplasm at their bulbous terminations Therefore Berkley believes that it is only between these free terminations that nerve impulses can pass The mode of branching of the axites varies according as they form ascending fibres (extrinsic) or belong to local cells (intrinsic) The extrinsic break up into a number of filaments, usually at some distance from one another, which re divide into a small number of others These course over a short extent of territory and terminate in flattened or globular extremities, the number seldom exceeding six or eight (Fig 2)

The terminations from the collaterals of the psychical cells show a very different disposition Winding among the dendrites of the cells and often closely applied to them they seldom show any definite endings until the mid portion of the layer of small pyramidal cells is reached There they split up into a number of exceedingly fine branches, which frequently run parallel with the course pursued by the apical and basal dendrites They eventually give off at frequent intervals exceedingly short collaterals, usually from the side nearest to the dendrites, which terminate in a round or flattened bulb like extremity similar to those on the branches of the ascending fibres These are closely applied to the bulbous tip of the gemmules, the appearance often suggesting one of actual contact, the axonal discharges of the stimuli overleaping the infinitesimal distance between the bulb and gemmule (Fig 1) "The interpretation of the objective existence of the terminal apparatus of the nerve fibres," Berkley says, "cannot be made but in one way—namely, that the impressions conveyed from external sources to central cell and from local cell to local cell are not accomplished by a diffusion of the excitation through the whole cortex, or even at various points along the course of the finer branches of the axons, but at single points perfectly definite in their distribution, and that these points are situated only at the extremities of the nerve fibre twigs, in the form of an histologically exact formation—the bulbous ending of the nerve fibre—which in itself constitutes the sole and only means for the carrying over of the cellular forces from axon to dendron and from cell to cell, and is in entire conformity with the conception of Waldeyer of the entity of the neuron, each cell standing as a unit in the nervous formation and only in continuity with others at definite points" In a still more recent communication Lugaro also states that the transmission of impulses occurs through the extremity of the gemmules These he believes are capable of expansion and retraction to a slight degree, and upon this function he bases his theory, which I shall presently allude to, of psychical processes A form of nerve termination in the central nervous system has been described by Aldren Turner and Hunter in the Spring number of *Brain* for 1899, but so far this has not been utilised to explain sleep After injecting methylene-blue into the circulation during life they found after death a fine lattice-work arrangement over the cells in most parts of the brain This was most marked over the root of the axis cylinder process and according to these authors it is the termination of the axis cylinder of another cell There is no continuity of tissue and therefore the entity of the neuron is not questioned Nerve impulses are believed to pass from the network to the cell body and not from terminal axite to dendrite, or *vice versâ* The function of the dendritic processes, the authors are inclined to believe, is nutritive—a theory first suggested by Golgi

After this brief survey of the place of the neuron in nerve-physiology we shall be better able to understand some of the theories which have been put forward to explain sleep But before dealing with these it will be well to review the facts which it is necessary to explain Speaking generally, during sleep the whole metabolism of the body is depressed The respirations are shallower, the aeration of the blood is less active, the pulse is less frequent, the blood pressure is lower and the temperature tends to fall, the nervous system is so affected that sense stimuli of moderate intensity are not perceived, and consciousness is in abeyance, but reflex effects can still be obtained These phenomena are not constant during the sleeping state, but vary within fairly wide limits On this account some of them have been credited with an etiological rôle, and this leads us on to the

THEORIES OF SLEEP

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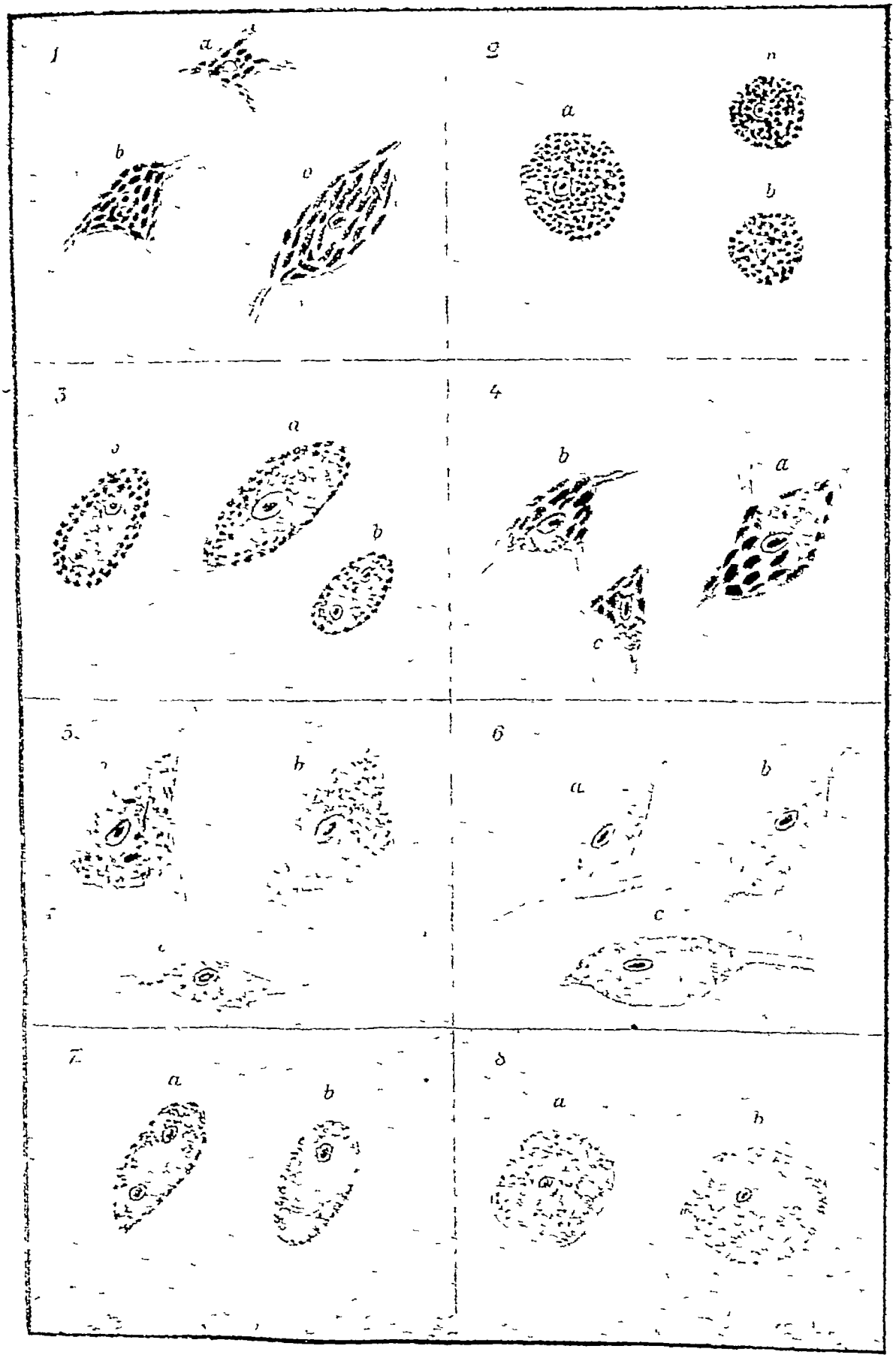
FIG 3



[For description see opposite page]

has advanced a modified form of the vaso-motor theory based upon personal experiments. According to him the anæmia of the cortex is counterbalanced by the dilatation of the vessels at the base of the brain The causal factor of sleep is a fatigue of the vaso motor centre and particularly of that part of it supplying the skin area This Professor Howell deduces from the fact that the volume of the arm increases (that is, the cutaneous blood vessels dilate) just previously to sleep, and it usually contracts suddenly on awaking He does not, however, ascribe the production of sleep solely to the fall of blood pressure, but he regards this as pre-eminent The etiological factors he gives as follows 1 A diminution of irritability caused by fatigue of large portions of the cortical area 2 Voluntary withdrawal of sensory and mental stimuli involved in the preparations for sleep 3 A diminished blood supply to the brain owing to a relaxation of tone in the vaso motor centres and the fall of general arterial pressure thereby produced Recently Dr Leonard Hill has criticised Professor Howell's results, or rather his deductions from his results He finds that the fall of arterial pressure is concomitant with sleep and he adduces confirmatory experiments Thus he found arterial pressure "as low when lying in bed in the waking state in the morning as in the sleepy state in the evening"—a result evidently antagonistic to Professor Howell's theory Moreover, it is not difficult to explain the fall of blood pressure during sleep, or even previously to sleep, by the posture, the diminution of external stimuli, the extra clothing, &c, which we seek before endeavouring to sleep The rapid rise of blood pressure at the moment of awaking Dr Leonard Hill explains thus "As the waking state is neared the turgescence of the limbs is lessened owing to the increased tone of the muscles and to the restlessness of the sleeper Each movement or deep respiration expresses the blood and produces a lessening in the volume of the arm This is shown to be so by an examination of Howell s tracings Since each movement of the body momentarily raises the vena cava pressure the brain is congested thereby, for the cerebral circulation passively follows every change in vena-cava pressure The flushing of the brain is secondary to the external stimuli which provoke the external movements of the body, accelerate the heart, and increase the vaso motor tone At the same time these stimuli may awaken the dormant consciousness Carefully reviewing all the above facts we must, I think, conclude that the anæmia of the brain is caused by rest of the body and the cessation of powerful objective and subjective stimuli It is the cessation of the latter that produces sleep."

As regards the fall of arterial pressure being *post* or *propter* I agree with Dr Leonard Hill that it is the former The vaso-motor theory of sleep is quite inadequate to explain this condition, nevertheless, vascular phenomena play a part, and an important part, in sleep production What, then, is the probable condition of the cerebral vessels in sleep? We have seen that the brain is a closed cavity, that the general arterial pressure falls during sleep, and that the pressure in the intra cranial veins varies absolutely with that of the intra thoracic venous pressure, and it may be further stated that the intra-cerebral blood vessels have not been shown to possess any vaso-motor innervation It follows from these and other facts that the arteriole pressure is dependent on the venous pressure and that any diminution in the size of the arterioles must be replaced by increase in size of the veins or other cerebral vessels Professor Howell believes that the basal vessels dilate, but I am more inclined to agree with Cappie who attributes the greater action to the pial vessels, probably both sets of vessels are involved But the condition during sleep, it seems to me, is rather one of comparative blood stasis than of simple anæmia In either case a smaller amount of blood passes through the cerebral vessels in a given interval of time and this is in reality the essential factor And although I cannot regard a fall in blood pressure as the primary causal factor of sleep, yet the diminished supply of nutriment thus produced must exert a depressing influence on the metabolism of the cerebral cells and aid in sustaining, if not in inducing, sleep That the fall of arterial pressure is not necessary is shown by the action of many hypnotics, which directly exert no influence in this direction, but it may also be said that, other things being fairly equal, those hypnotics which depress blood pressure are more certain sleep-producers than those which do not Chloral, for example, is more certain than any of its derivatives Indeed, it seems to me that the evidence of pharmacology in dealing with the various theories of sleep has been too much neglected Perhaps it has not much to give, but at least it may help in correcting theories framed on other and different lines The admissibility of pharmacological evidence naturally raises the question as to whether forced sleep from drugs is comparable to natural sleep Although some hold to the contrary I am inclined to believe that it is The restorative effect of a properly apportioned dose of a hypnotic in a mild case of insomnia is suggestive Moreover if we accept the idea that sleep is the result of chemical changes in the cerebral cells this conception gains in force, as the introduction of a hypnotic into the organism merely means a change in the environment of the cell with subsequent variation in its activity To deduce from the narcosis produced by large doses of these drugs that artificially produced and natural sleep are dissimilar is unfair, in this case the stimulus is excessive and the result not comparable But to return to the theories of sleep

The various *chemical theories* which have been put forward seem to have been based on insufficient data. With the older theories of Sommer and Pflüger and others I do not intend to deal But comparatively recently a new chemical theory has been advanced Errera believes that the leucomaines produced by the normal activity of the body play a predominant part He has based his view mainly on the experiments of Bouchard and his school, who found that during the night convulsant substances were excreted in the urine which were not present during the day The toxicity of the urine during sleep was found to be much less than that of the urine passed whilst awake On these experiments Bouchard formulated the theory that during the day the body formed a hypnotic substance which by its accumulation produced sleep and that during sleep a convulsant substance was formed which by inducing muscular movements produced awakening Both Beck and Herringham have failed to corroborate Bouchard's experiments, but apart from this it is difficult from evidence of this kind to draw conclusions as to the cause of sleep The urine is a complex body, it varies largely in composition with the kind of food, the amount of exercise, and other physiological and pathological conditions, and this variation is greater with this than with other secretions It does not seem right to compare the variability of the composition of the urine with the periodic alterations in the temperature and pulse, the limits of the first are much wider Furthermore, as in the case of blood pressure, it does not seem to me proved that this altered composition of the urine is not *post* rather than *propter* I do not mean to imply that metabolic changes have no influence in the production of sleep, but what I do maintain is that sleep has not been proved to be due to any one substance or group of substances present in the urine The chemical theory from another point of view I shall mention presently

The fourth class of our division of the theories of sleep is the *psychological* And here we enter upon difficult ground We have seen that the physiological and psychological are two separate spheres with independent methods of analysis, that the elements of the two sciences are different, and that the connexion between the two can only be one of parallelism It may be that we shall never get beyond this stage—that the physical and the psychical even in their simplest forms are not comparable, but from a physiological point of view there seems nothing improbable in the idea that they may be correlated Marie de Manacéine, in a popular book on sleep published two years ago, defines sleep as "the resting time of consciousness,"

DESCRIPTION OF FIG 3

This figure is made up of eight small figures (After Vas.)

Fig 1, *a*, Normal anterior cornual cell of the spinal cord of the rabbit; *bb* the same of the spinal cord of the dog.

Fig 2, *a*, Normal spinal ganglion cell of the dog *bb*, Normal spinal ganglion cell of the rabbit.

Fig. 3, Normal ganglion cell of the first cervical sympathetic nerve of the dog

Fig. 4 *a*, Anterior cornual cell poisoned with alcohol in a dog stage of partial degeneration *b* Anterior cornual cell poisoned with alcohol in a rabbit stage of partial degeneration *c* Anterior cornual cell poisoned with nicotine in a rabbit stage of partial degeneration.

Fig. 5, Small granular disintegration of the chromatine structure *a*, Alcohol dog *b* Alcohol rabbit; *c*, Nicotine rabbit.

Fig 6 Anterior cornual cell in the stage of homogeneous swelling *a* Dog *b* Alcohol rabbit *c* Nicotine rabbit

Fig. 7 Disintegration and homogeneousness of the chromatine structure of the cells of the sympathetic ganglion (first cervical). *a* Nicotine rabbit *b*, Alcohol rabbit

Fig 8 The same in the cells of the spinal ganglion of the rabbit. *a* Nicotine *b* Alcohol

and perhaps from a psychological point of view no better definition could be given, but to me it is a mere statement of a psychological fact, not an explanation We cannot account for sleep in such an immaterial manner We may not be able, perhaps, to give any further explanation at present, but the acceptance of such a theory would deprive us of that most valuable aid to research, a working hypothesis It is not improbable that the new schools of psychological physiology, and especially those which deal with it from the pharmacological side, may help us to a truer conception of the causes of sleep Wundt and his pupils have already added something in this direction, and it is especially to his pupil Kraepelin that much of our knowledge in this department is due In a recent paper from his laboratory a new explanation of the action of hypnotics is given Working on the psychical influence of trional with Kraepelin's methods Hans Haenel found it to diminish the power of calculating and learning by heart, to increase the time in the choice-reaction, to diminish the erroneous reactions, to increase faults and omissions in reading and apprehension, and to diminish the rapidity of writing He found it, however, to exert no influence on association and muscular work (ergographic curves) nor on the rapidity of repeating things previously learnt The hypnotic action of the drug is explained, Haenel says, by the depression of apprehension and the increased difficulty in originating coördinate movements He draws attention to the fact that these, and especially diminished power of apprehension, are present after all hypnotic drugs have been given, and the fact that morphine is not regarded as a hypnotic in small doses is due to the stimulant rather than to the depressing effect which this exerts on psychical processes This in psychological terms is the condition produced by the action of hypnotics, but as an explanation of sleep it is not sufficient

If, then, we feel obliged to discard psychological explanations—and with due deference we must do this—we can only return to physical and biological science As we have said, the fundamental changes must be in the neurons themselves I am inclined to believe that these are primarily of a chemical character The differences observed between rest and activity and the changes resulting from the administration of various poisons (Fig 3), I think, support this view But these differences are in no sense crucial Before we could consider them such it would be necessary to know for certain what cells are concerned in the production of mental phenomena and what changes result from the action of hypnotic drugs upon them The action of poisons on nerve-cells generally is, however, at least suggestive, as it shows that marked changes of a more or less transient character may occur during life As many years ago as the year 1876 W Ludwig, a pupil of Binz described changes in the nerve-cells of excised and teased cerebral tissue after the application of hypnotics, and came to the conclusion that these, even when well diluted, produce a kind of coagulation of the albumin of the nerve-cells which is not produced by other and closely allied bodies devoid of hypnotic powers A year later Binz himself described the effect of morphine on isolated nerve-cells After a time a kind of coagulation necrosis was produced which did not occur after the application of atropine or cocaine Strychnine and quinine, however, produced the same effect, so that the action is not limited to hypnotics More recently the action of poisons has been investigated by means of Nissl's method, and a great number, including many metals, alkaloids, and toxins, have been found to produce distinct changes Nissl believes that this action is characteristic for the same poison and the same kind of cell, but as yet there is a want of unanimity on this point That decided morphological changes may be produced by the action of poisons all are agreed, and that these changes may be rapidly produced has been shown by Goldscheider and Flatau in some recent interesting researches Three minutes after a hypodermic injection of strychnine they found a slight swelling of the nucleolar bodies in some cells, and 12 minutes after an injection, when symptoms (tetanus, &c) had been produced, changes also in Nissl's corpuscles The transitory nature of these changes was demonstrated by poisoning an animal with malonic nitrile and antagonising the effect by subsequent injection of sodium thiosulphate The marked changes produced by the former—the breaking up of Nissl's corpuscles, &c —were completely antagonised within 70 hours by the latter The antitoxin of tetanus was also found to possess an inhibiting effect on the changes produced by the toxin But the morphological changes did not always run parallel with the clinical symptoms With concentrated solutions of tetanus toxin, for example, the symptoms increased until death occurred, while the changes in the nerve-cells after reaching a certain height slightly receded Similarly after weak solutions the symptoms increased, while the morphological changes remained stationary or even became effaced And the same was found to be the case with strychnine and malonic nitrile The meaning of this we do not know and in the present state of cellular physiology it is hazardous to guess The function of Nissl's bodies is unknown and their existence under normal conditions has even been doubted From investigations by Nissl's method, however, there can be no doubt that visible changes, often of a very marked kind, are produced in nerve-cells by the action of poisons, and these we can only regard as of a chemical nature Changes, too, are produced in the dendritic terminations of the cells, and usually these appear earlier and are more marked than those in the cell body But in the dendrites more than in the cell observers differ as to the exact conditions present Thus after the administration of morphine Demoor describes nodosities on the dendrites which in extreme cases are reduced to mere moniliform filaments, while Lugaro observed expansion of the gemmules and very slight thickening of the processes Alterations of the dendrites have been noticed by various observers after hypnotic drugs, and there can be little doubt that transmission of nerve impulses through these must thereby be markedly retarded, if not prevented

Owing to the differences of opinion of observers regarding the exact condition produced by hypnotic drugs it is impossible to draw a satisfactory conclusion regarding their mode of action or the cause of sleep I am inclined to believe that hypnotics act chemically upon the neurons, both upon the cell bodies and their dendrites, and I think histological observations support this view Retraction of the terminal processes or gemmules, if such occur, I believe to be secondary But what part is played by the cell body and what by the terminal processes it is difficult to say The finer dendrites are probably more exposed to external influences and any modifications in them must affect the transmission of nerve impulses, but the cell body is the seat of metabolic activity and this, too, must be readily affected by changes in the environment At the present time there is a tendency to regard the functions of the cell body as purely nutritive, but although this may be the case with such cells as those of the posterior root gangha it is probably not the case with the cortical cells of the brain or even with the cells of the spinal cord But a discussion of this would lead us too far afield and in the end we should have once more to confess our ignorance Lugaro's view of the action of hypnotics and the cause of sleep I have already noticed Demoor, as a result of his histological researches, desists from any attempt to formulate a theory of sleep "Regular and periodic sleep, like the sleep produced by chloroform and morphine, and the inactivity succeeding exaggerated work, finds," he thinks, "its application in part of the facts studied in this work," but the cause of the appearance of sleep he "lays aside, like many others, without a solution," and as regards its intimate nature we with little more knowledge must do likewise

Turning now to the more immediate object of these lectures I intend to deal with the class of hypnotics in a very general manner The next two lectures will be devoted purely to pharmacological matters, in the last I propose to deal with the rational treatment of insomnia The pharmacology will not, however, be solely concerned with the hypnotic influence of the drugs I intend to take a much broader view and extend my thought to substances which, although they possess no value as medicaments, yet are of considerable pharmacological interest As the tendency for many years past has been towards a chemical view of pharmacological actions I shall as far as possible take up this line I propose first to deal with the hypnotics of the fatty series and afterwards with those obtained from the vegetable kingdom

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relative immunity in the inoculated, considered separately during those three periods shows that during the first four days the inoculated had proportionately 1 86 times fewer deaths from cholera than the uninoculated During the period between the fifth and 420th days—i e, for a period of nearly 14 months—the number of deaths among the inoculated was 22 62 times smaller than amongst the uninoculated And for the rest of the time under observation the proportion in their favour fell to 1 to 1 54 The plan has since been formed to try the effect of larger doses and of stronger vaccine in order to obtain a more lasting protection

While thus the absolute number of cases and deaths from cholera appeared so strikingly influenced by inoculation the particularity that came out from the observations in Calcutta as well as in other places was that the proportion of deaths to cases did not appear to be changed by the treatment. Thus in the observations made in a camp of coolies of the Assam Burmah Railway Survey out of 33 attacked among the uninoculated portion of the camp 29 died, and of four attacked among the inoculated all four died In the Durbhanga prison out of 11 uninoculated attacked all 11 died while of five inoculated attacked three succumbed In the Gaya jail 20 uninoculated attacked had 10 deaths, and eight inoculated attacked had five In a group of tea plantations in Assam 154 cases in uninoculated had 60 deaths, 15 cases in inoculated had four In the East Lancashire Regiment in Lucknow 120 uninoculated attacked had 79 deaths and 18 inoculated attacked had 13 This circumstance, the non reduction of the case mortality by a treatment which influenced unmistakeably the case incidence, appeared as an astonishing divergence from the result of small pox vaccination where both the number of attacks and their fatality are reduced by the treatment. The new aspect of the problem of preventive inoculation which thus presented itself in the observations on human communities consisted in the possibility of a prophylactic treatment being directed separately towards the reduction of the number of attacks, leaving the fatality of the disease unchecked, and towards the mitigating of the character of the disease and the reduction of the case mortality in those who are attacked.

POSSIBLE RELATION BETWEEN THE TWO

In analysing the nature of this particular result the following two facts known in the laboratory practice presented themselves to me as of essential significance In patients who recover from an infectious disease the pathogenic microbe does not disappear from their body for a considerable time after their recovery It does not do them harm any longer, though when transferred to another animal it may still cause a fatal attack. Similarly, as in the case for instance, of a guinea pig inoculated with the bacillus of chicken cholera a naturally immune animal can breed for weeks in an abscess microbes of an intense virulence without the least suffering in its own general health A condition seems to set in in the convalescent patient, or to exist in naturally immune animals, whereby they may not suffer from the result of activity of a pathogenic microbe, from its morbid products, and from that time the presence of the microbe in the system, even in the tissues, becomes innocuous Immunity against symptoms generated by the products of microbes does not seem to imply necessarily the ridding of the system of such microbes It is known now since the discoveries of Behring and Kitasato that such a resistance against the products can be originated artificially by gradually treating the system with increased quantities of toxins The system reacts by developing antitoxins, tending to neutralise the effect of the toxins On the other hand Gamaleia first attracted attention to the fact that it is possible to create in an animal resistance against lethal doses of virulent microbes without that animal getting any resistance against a dose of the products prepared from the microbe in the laboratory One seems justified therefore to consider separately two kinds of immunity, one against the living microbe which would prevent it from entering the system and causing an attack, and another against the fatality of the symptoms of the disease caused by the products of the microbe when the latter overcomes the initial resistance and does invade the system In the inoculation against cholera which is done with the bodies of microbes, the first result alone is obtained

These considerations came to be strengthened by a set of laboratory experiments by Pfeiffer and Kolle, intended for verifying our Indian results, and in the course of which they detected in the serum of men inoculated with only one dose of cholera vaccine an extremely high protective power, equal to that which, in goats, for instance, could be created only after a very prolonged treatment, extended over five or six months, and including injections with gigantic doses of cholera vaccine On analysing in detail the properties of that serum they found that it possessed an intense power of destroying the cholera microbes, but exhibited no antitoxic properties capable of neutralising the effect of the products of those microbes

THE PLAN OF ANTI PLAGUE INOCULATION

When, in 1896, I was confronted with the problem of working out a prophylactic treatment against the plague I determined to put to test the ideas originated by the observations on our cholera patients and to attempt, in the new preventive inoculation to obtain at once a lowering of the susceptibility to the disease and a reduction of the case mortality This I resolved to obtain by treating the system with a combination of bodies of microbes and of concentrated products of them —In giving the above considerations I beg that they should be considered as temporary, subject to modification or to complete refutation There may exist already facts unknown to me which are opposed to the guesses implied in them It was those guesses which led to the results obtained in the plague inoculation, but in giving the reasoning which I passed through while working out the method I am yielding only to a demand to that effect, as I consider that part of my communication unnecessary, the more so that the theoretical conjectures above enumerated are not shared by a number of experimenters, such as Pfeiffer himself, to whose results I owe some of my premisses, and the correctness of the composition of the plague prophylactic with regard to the extracellular toxins which I have added to it is subjected to theoretical contest It is certain that no theoretical conjectures conceived by one experimenter are binding or need even be interesting to others What is obligatory is the acceptance of the actual results obtained.

THE PLAGUE PROPHYLACTIC

In order to accumulate for the plague prophylactic a large amount of extra cellular toxins the bacilli are cultivated on the surface of a liquid medium where they are suspended by means of drops of clarified butter or of cocoanut oil The bacilli grow down in long threads into the depth of the liquid and produce what we have termed a stalactite growth in broth, an appearance singularly peculiar to this microbe and which, I hope, will be till further discovery accepted as the specific diagnostic feature of this microbe The products of their vital exchange—the toxins—are secreted by the stalactites into the liquid and accumulated there The growth is periodically shaken off the drops of oil, after which a new crop appears underneath the surface of the liquid. Thus a large quantity of bodies of microbes is collected at the bottom of the cultivation vessel and the liquid itself gets gradually permeated with increasing quantities of toxins The process is continued for a period of from five to six weeks, at the end of which the bodies of the microbes get extremely deteriorated It will be seen from this that in my eagerness to put to test our ability of influencing the case mortality I may have perhaps paid less attention than I might have done to the problem of reducing the number of attacks, and I have now sketched out a simple plan whereby to test this circumstance and to try to further improve our results from this point of view In order to render harmless the inoculation of the virus above described I determined to kill the microbes by heating the material up to from 65° to 70 C The virus so treated differently from what one observes in some other instances, loses at once for the animals susceptible to the disease almost all its pathogenic power, and it was a question to determine whether it contained qualities that were sought for—viz. the power of creating in man a useful degree of resistance to plague. The plan has been contested by a number of experimenters who tried a material similarly prepared on different animals and failed to detect in it any immunising properties Among other forms of plague virus which were tested by us and by other experimenters a large number were found to be too dangerous to use, in other instances the mode of application was inadmissible in the case of men, in others again the effect appeared too evanescent to be of practical use

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A Discourse

ON

PREVENTIVE INOCULATION,

Delivered at the Royal Society, London, on June 8th, 1899,

BY W M HAFFKINE, C I E,

BACTERIOLOGICAL RESEARCH OFFICER TO THE INDIAN GOVERNMENT

MR PRESIDENT AND GENTLEMEN,—The most important modern methods of prophylactic treatment are based upon the fact that an attack of disease from which an individual recovers leaves in him a condition of resistance to another attack The possibility of turning to advantage this fact was first demonstrated to us by Mahomedan physicians to whom the world thus owes the knowledge of what proved to be one of the most fertile principles of modern science The successes of Jenner and Pasteur, who utilised cultivated virus for preventive treatment, have led to a general conception that there is the possibility of creating artificial immunity to diseases by treating the organism with morbid products rendered by some special means harmless This definition involves a generalisation which led to a considerable amount of disappointment, as the application of the principle in a number of instances did not give the expected results

DERIVATES FROM MICROBIAL VIRUS AND THEIR EFFECT

When we cultivate a pathogenic micro-organism in a liquid medium two different elements are obtained mixed together the bodies of the microbe and the liquid which it has modified and into which it has secreted its own products A modification of the entire preparation, as represented by this mixture, can be first of all obtained by filtering the two elements just mentioned and considering each of them by itself, or else the two can be left together and only the vitality of the microbe destroyed by some physical or chemical agent, or the constitution and the properties of each or of both of these elements can be to a desired degree altered by the admixture of chemicals or by subjecting them to physical processes, or else the vital and pathogenic properties of the microbe can be modified by artificial breeding, and then the microbe itself or the products of such a modified microbe used for treatment The immediate effect which a given virus or its derivate produces on an animal differs with the kind of virus taken, the process of modification to which it has been subjected, and the species of animals upon which it is used The following instance may give an idea of these variations

The ordinary Indian grey as well as the brown monkey are susceptible to the plague virus and may contract a fatal disease from being simply pricked with an infected needle The rabbit and guinea pig are also susceptible to the disease The horse, on the contrary, contracts no fatal disease after being infected even with large doses of the living virus If, however, a plague culture be heated and the microbes killed in it the relations between the monkey and the horse seem to become the reverse of the former, the guinea pig remains comparable with the monkey, while the rabbit shares with the horse the susceptibility which it shared first with the monkey It will require, according to several observers, a very large dose of such treated virus to produce in the monkey or in the guinea pig any marked rise of temperature or any alteration of the skin at the seat of injection, while the horse answers to the injection by almost as brisk an attack of fever as if the virus were a living one, and at the seat of inoculation a tumour is produced which, if the dose be at all considerable, may lead to a complete mortification of the tissue The rabbit similarly answers to the injection by an attack of fever and by the formation of a hard tumour at the seat of injection

As varied as is the immediate effect of different forms of virus upon different animals, so varied is the result of the application of such virus from the point of view of immunity conferred by it There are animals in which the inoculation leaves no lasting effect whatever In others a very temporary immunity is created, vanishing away in a few days In other cases, again, a condition appears that produces the impression as if after the treatment the animal has become more susceptible to a subsequent infection than is a normal, not so treated animal And, lastly, there may be found animals in which the same virus will produce a great and long lasting immunity In general I believe it to be admissible that in the case of every disease and with regard to every species of animals a form of treatment may be found that will produce immunity against disease in that particular case, but the same method of treatment may or may not be applicable to another animal or to another disease affecting the same animal It is the not taking into account of this variation of circumstances that I believe more than anything else has checked the success of a number of experimenters

IMMUNITY AGAINST ATTACK AND RESISTANCE AGAINST THE ACTUAL SYMPTOMS OF THE DISEASE

The study of the anti cholera inoculation in India has revealed a new problem in the subject of prophylactic treatment The particular character of cholera epidemics which appear unexpectedly, do not last, and in places where they are permanent are spread and scattered over large areas makes the study of that disease and the demonstration of the effect of a preventive treatment in its case a matter of much greater difficulty than is the case in localised contagious diseases like small pox or in plague, and although a large amount of material has been collected already it is desirable that a number of observations be added to the presents ones confirmatory of the results obtained The information collected permits, however, already of pointing out very important features in the working of the anti cholera inoculation The most extended and continuous observations on the subject were organised by the municipality of Calcutta upon the enlightened initiative of Dr W J Simpson and under his continuous supervision as well as my own These observations refer to the cholera stricken suburbs of Calcutta, the so-called "bustles" or groups of huts situated round the tanks where rain water is collected during the monsoon Some 8000 people were inoculated in those localities and for two years observations were made and the results collected as to the occurrences of cholera in the huts inhabited by the inoculated In the vast majority of cases there lived in the same families members who had not been inoculated together with others inoculated and the possibility thus presented itself of comparing the incidence of the disease in individuals of the same households, exposed as much as is possible to the same chances of infection

During the time under observation cases of cholera occurred in 77 huts As a result of careful investigation of these cases[1] it was seen that for a period of 738 days cases of cholera occurred among the uninoculated at all intervals after the date of inoculation, whereas the figures referring to the inoculated showed a striking variation of the incidence when compared at various distances from the time of inoculation Cases continued to occur among the inoculated for a period of four days after the treatment and then for 416 days the inoculated practically remained free from the disease, only one death having occurred among them during that time From the 421st day up to the end of the observation six cases occurred among them again The

[1] Vide Health Officer's Report to the chairman of the Calcutta Municipal Corporation, reprinted in the 'Indian Medical Gazette' vol. xxxi., No 8, August, 1896

which dose, however, in our subsequent operations was further reduced to two and a half cubic centimetres The difference in favour of the inoculated appeared within some 12 hours after the operation, but the man who was inoculated with plague on him and the two who developed clear symptoms of plague the same evening did not benefit by the operation. This completed the first information gathered with regard to five of the six questions enumerated above No answer could be given as to the final duration of the effect of inoculation except that the operation appeared to be useful in a localised already existing epidemic extending over seven days

THE EXPERIMENT IN THE UMERKADI COMMON JAIL, BOMBAY

In the next case the strictness of the conditions of the last experiment was enhanced further This was in the second Bombay gaol, the so-called Umerkadi Common Jail The plague broke out there at the end of December, 1897, and by Jan 1st, 1898 three prisoners were attacked and all of them subsequently died In the interval between the operations in the two jails some 8000 people in the free population of Bombay had already availed themselves of the inoculation This time the whole of the prisoners, numbering 401, appeared willing to undergo the preventive treatment In view of the novelty of the operation, however, and of our responsibilities before the Government and the public, and the necessity of demonstrating clearly the effect of inoculation, the prisoners were not allowed to undergo the treatment in a body and it was resolved that only one half of them should be permitted to do so The manner in which that half was selected guaranteed the elimination of all possible errors usually inherent to observations on free human communities The population of a jail in India is gathered into several groups, the largest being the ordinary convicts divided into simple prisoners and convicts sentenced to hard labour, then there is a group of civil prisoners (debtors), then a group of prisoners under trial, of convict warders, of cooks, of bakers, of men employed in the infirmary, &c, and a separate group of female prisoners

On the morning of Jan 1st, 1898, in the presence of Major Colhe, I M S, and Dr Leon, the medical officers and of Mr Mackenzie, the superintendent, and of all the officials of the jail, the above groups were brought one after the other into the jail yard and asked to seat themselves in rows, and after all had been so seated every second man without further distinction was inoculated, excepting two of them who did not volunteer for the treatment From this moment the pair numbers, the inoculated, were left to live with the uninoculated under as identical conditions as were those in which they were living before They had the same food and drink, the same hours of work and of rest, and they shared with them the same yards and building, &c

In this case fatal attacks continued to occur in the jail for 30 days, during which time an almost equal number of prisoners, inoculated and uninoculated, were discharged from jail and thus excluded from further observation The average daily strength of the uninoculated who remained in the jail up to the end exposed to the plague was 127, and of the inoculated 147 In the smaller number of uninoculated 10 cases of plague occurred, six of them proving fatal, while the larger number of inoculated produced three cases, of whom all recovered. In these three cases, however, in the inoculated, the character of the disease was so much mitigated that the authorities of the Government hospital at Parel, Bombay, where they were sent, hesitated to return them as plague cases, and the Director General of the Indian Medical Service who examined two of them diagnosed them as mumps They were returned as cases of plague in order that no possibility of error in favour of inoculation should be admitted

THE EXPERIMENT IN THE DHARWAR JAIL

On the third and last occasion when the plague broke out in a jail one did not feel justified in withholding the inoculation from any of the inmates and all of them were permitted to be inoculated This was in Dharwar during the terrible outbreak of plague in that town and district, the news of which must have reached you even here Five cases of plague occurred of which one was imported, and four in old residents of the jail and all five ended fatally The prisoners, then numbering 373, submitted in a body to inoculation and only one case of plague followed, in a man who had been attacked two days after the operation and who recovered, being the only one who did not succumb

THE EXPERIMENT AT UNDHERA IN A FREE POPULATION

The most carefully planned out and precise demonstration of the working of the prophylactic system in the free population which was exposed to a greater amount of infection than the prisoners in the jails was that made in the village of Undhera, six miles from Baroda The following was the mode of operation adopted. A detailed census was made by the authorities of all the inhabitants of the place and on Feb 12th, 1898, when a committee of British and native officers arrived to carry out the inoculation, the people were paraded in the streets in four wards family by family Major Bannerman, I.M S, of the Madras Medical Establishment, and myself, accompanied by the Baroda officials, went from one household to another and within each inoculated half the number of the male members, half that of the females, and half that of the children, compensating for odd figures that happened to be in one family by odd figures in another I personally and the officers who were with me directed special attention to distributing the few sick in the two groups of inoculated and uninoculated as equally as our judgment permitted us to do The plague, which had carried away before inoculation 79 victims, continued afterwards in this instance for 42 days and appeared in 28 families, in which the aggregate number of uninoculated was 64 and of inoculated 71 The total number of attacks in those families was 35 and they were distributed as follows The 64 uninoculated had 27 cases with 26 deaths, and the 71 inoculated had eight cases with three deaths, thus showing 89 65 per cent. of deaths fewer in the inoculated members of the families than in the uninoculated There were no deaths from other causes in the inoculated of the village, while among the uninoculated there were three deaths attributed to other causes than plague

The subjoined figures show the number of days which elapsed between the date of inoculation and the occurrence of a death from plague in these families The first row of figures refers to occurrences in uninoculated members, the second to occurrences in inoculated, while the small figures show the number of deaths which occurred in each group on those days

Deaths from plague occurred in uninoculated and in inoculated:

3^2 4^1 5^1 7^2 8^1—10^1 11^3 12^1———15^1 16^1 19^1 20^1 21^1 24^1 32^1 and 42^1

———9^1———12^1 and 14^1

days after date of inoculation.

There elapsed, therefore, eight days during which 11 deaths from plague occurred among the uninoculated members of the families before the first death took place in an inoculated case The inoculation has again acted, so to say, immediately, or, as we have adopted to generally formulate the result, has acted within the time necessary for the subsidence of the *general* reactionary symptoms produced by the inoculation

The investigation in this village was carried out by Surgeon General Harvey, the Director General of the Indian Medical Service, and a committee of British and native officials Every member of the family who survived was seen, his particulars verified from the documents, and every detail was confirmed from the registers kept at the time and from the testimony of the whole of the villagers who were present throughout the inquiry

EXPERIMENTS ON A LARGE SCALE AND AVERAGES OF THE RESULTS OBTAINED

I have dwelt so long upon the description of the above experiments, not because they were the largest in volume or the most striking which were made, but because they were the most precise of all and, as far as I am aware, free from any possible loophole of mistake I made prolonged and detailed observations in very severely affected communities of Lanowlie in a population of 700 people, and of the followers of the artillery at Kirkee, numbering at the time 1530 Very complete data were collected by Professor R Koch and Professor Gaffky of the German Government Commission, by Major Lyons, I M S, and by myself in the Portuguese colony of Damaon in a population of 8230 individuals, during a frightful outbreak of plague there, extending over four months, in 1897 A minute investigation, extending over several months, was made by me in the Khoja Mussulman community of Bombay,

THE PROPERTIES OF THE PLAGUE PROPHYLACTIC

The immunising effect of the plague prophylactic as above described was worked out on domestic rabbits and its actual efficiency on these animals was since verified and confirmed by a number of experimenters by trying to infect with virulent plague protected and unprotected animals Comparing the rabbit with other laboratory animals, such as the rat, the guinea pig, the mouse, and the monkey, one may consider the rabbit as the one that perhaps required the least amount of protection, as its natural resistance to plague is relatively high The most altered virus—i e , such as was rendered the most harmless of all—was found to confer on the rabbit a very considerable degree of immunity, enabling it in a few days to resist ten or fifteen fold lethal doses of virulent plague microbes The same treatment applied to animals of a more susceptible nature would, on the contrary, in many instances fail

THE QUESTIONS WHICH WERE TO BE SOLVED BY EXPERIMENTS ON HUMAN BEINGS

At the end of our laboratory experiments a very definite set of questions stood before us which were to be solved by direct experiment on human beings Those questions were 1 Would man behave with regard to the prophylactic like the animals upon whom its protective power had been worked out? 2 If it so happens that the answer is affirmative, what would the dose of the prophylactic and the method of administering it be, and would not the dose required be so high, and the reaction to be produced so severe, or the number of inoculations to be repeated so great, as to render the treatment inapplicable to men or impracticable? 3. How many days counting from the date of inoculation would it take to produce in man a useful degree of immunity? 4 How long would that immunity last? And lastly, there followed two questions, to which my experience of the anti cholera inoculation entitled me to give a reassuring answer, but which it was necessary to verify in plague again, viz 5 During the period of reactionary fever and all the other symptoms produced by inoculation, will the resistance of the inoculated exposed to plague be, for the time being, reduced, or remain the same, or be increased—i e , would it constitute a danger to apply the inoculation in localities actually affected with plague? and 6 When a man who happens to be incubating the plague, or to have initial symptoms of the disease already, chances to be inoculated, would it aggravate his condition, or have no effect, or, on the contrary, help him?

DEMONSTRATION OF THE HARMLESSNESS OF THE INOCULATION

The perfect harmlessness of the inoculation was first of all demonstrated by the officers of the laboratory, the principal and professors of the Grant Medical College, a large number of leading European and native gentlemen of Bombay, and their families and households being inoculated, and after that when, in the last week of January, 1897, the plague broke out in Her Majesty's House of Correction at Byculla, in Bombay, the option of inoculation was offered to the prisoners

THE EXPERIMENT IN HER MAJESTY'S BYCULLA HOUSE OF CORRECTION, BOMBAY

The Byculla Jail is a long term one There are no children or very young people among the inmates, there being in Bombay a separate establishment, the Sassoon Reformatory, where minor criminals are sent The prisoners of the House of Correction present a well fed, well clad, regularly worked, and almost as uniform a set of people as can be seen in a regiment, amongst whom one could scarcely see a single infirm or very aged individual At the appearance of plague the prisoners numbered 346 The inoculation was introduced after nine cases of plague had already occurred, five subsequently ending fatally, there remained thus 337 individuals to be dealt with Of these, 154 only volunteered for inoculation and 183 remained uninoculated On Jan 30th, in the forenoon, before the inoculation was applied, six more cases occurred of which three afterwards proved fatal The inoculation was applied in the afternoon, and afterwards it was discovered that one more prisoner had already a bubo on him when inoculated, while two prisoners developed buboes in the same evening after their inoculation These three inoculated, attacked in the evening of inoculation, proved also fatal. After that the difference observed in the fate of the two groups, the inoculated and uninoculated, is seen from the subjoined table —

Date of occurrence of plague	Occurrences in uninoculated.			Occurrences in inoculated.		
	Number of uninoculated present.	Cases	Fatal.	Number of inoculated present.	Cases	Fatal.
Jan. 23rd to 29th 1897 previously to the day of inoculation	—	9	5	—	—	—
30/1/97, the day of inoculation — Forenoon before inoculation	—	6	3	—	—	—
30/1/97, the day of inoculation — Afternoon, after inoculation ..	—	—	—	—	3	3
First day after inoculation 31/1/97 ...	177	2	1	151	1	—
Second day after inoculation, 1/2/97..	172	1	1	150	—	—
Third day after inoculation, 2/2/97 ...	173	1	1	146	—	—
Fifth day after inoculation 4/2/97	171	1	1	146	-	—
Sixth day after inoculation, 5/2/97	169	2	1	146	—	—
Seventh day after inoculation 6/2/97	169	5	1	146	1	—
Total after the day of inoculation ...	172 uninoculated, average daily strength.	12 cases	6 deaths.	147 inoculated average daily strength	2 cases.	No deaths

For seven days, except the fourth, after inoculation cases of plague continued to occur among the uninoculated group, their average daily strength throughout the week being 173; altogether, 12 cases occurred among them with six deaths; while in the 148 inoculated there was one case on the next day after inoculation which rapidly recovered and one on the last day of the epidemic which recovered also

ANALYSIS OF THE RESULTS OF THE BYCULLA JAIL EXPERIMENT

A glance at the above table will show the progress which was made in our information by that initial experiment and how far it carried us ahead from the state of uncertainty which surrounded the question originally The dose of prophylactic administered to the prisoners was three cubic centimetres They all had the customary attack of fever from the operation, with the discomfort accompanying that condition—a headache in many cases, nausea, loss of appetite for a couple of days, a feeling of fatigue and lassitude, reminding one of a mild attack of influenza, and with swelling and pain in the inoculated side Did, however, all this make them more susceptible to the disease than were their non inoculated fellow inmates? It is certain that the table testified unmistakeably to an opposite result Further, the incubation period in plague appears to be on the average five days, extending, however, not unfrequently up to 10 Of the 12 prisoners in the uninoculated group who developed plague during the next few days after the date of inoculation a large proportion, if not all, must have been already incubating the disease on that day, and seeing the perfect similarity of conditions under which the inoculated and the uninoculated, who came from the same crowd of people, were living one could infer safely that a similar group of individuals incubating plague was present among the inoculated also at the time when the inoculation was performed on them The inoculation, however, did not aggravate their condition, as the number of inoculated who developed plague, counting from the first twelve hours of inoculation, was proportionately five times smaller than the corresponding number among the uninoculated, and the two cases that appeared among the inoculated, one on the very next morning after inoculation, both ended in recovery As far as that first experiment went, therefore, men behaved like the laboratory animals which derived protection from the inoculation For communicating that protection one injection of prophylactic appeared sufficient with a dose of three cubic centimetres,

the other From this point of view the following distinction between infectious diseases is to be made When we take some affected tissue from a leper, or a pustule from a small pox patient, or virulent saliva from a rabid animal, or some syphilitic matter and throw it into milk, broth, or any organic substance such as is to be found in the ordinary surroundings of men, it produces no modification in the medium and in the course of time loses its infective properties and dies out, when, on the other hand, we repeat the experiment with cholera, or plague, or typhoid products, instead of dying out the contagion begins to grow and multiply, spreads in the medium, and soon transforms the whole of it into one mass of infectious matter It is evident that such a distinction—the strictly parasitic nature of one microbe and the capacity of the other to lead both a parasitic and saprophytic life—must impress most directly the ways in which these diseases spread and assume epidemic forms and also the measures which are likely to be effective in combating them In the first instance the infection must remain confined entirely, or almost so, to the body of the patient and the disease can be propagated only directly from individual to individual or by means of their immediate belongings It is the inability of a virus to grow in lifeless nature that communicates to that disease a strictly contagious character In the second case, provided the surrounding conditions be favourable to it the virus will spread rapidly around the original focus and the sources from which infection reaches fresh individuals grow in number rapidly

From the point of view of preventive measures, therefore, in diseases like rabies, or syphilis, or small pox, or leprosy, where infection can be found in the patient alone precautions of isolation taken with regard to the sick and their closest surroundings must affect directly the prevalence and propagation of the disease, whereas in typhoid fever or cholera, and in plague also, where the patient is only one, and proportionately a limited, source of danger, his isolation and the destruction of his belongings leaves unaffected the vast cultivations of infection which are going on in nature besides, and measures taken for circumscribing the prevalence of an epidemic by isolating and destroying the foci of infection are less likely to succeed in this category of diseases, attempts at eradicating an epidemic or at protecting individuals by ways which succeed in merely contagious affections will be in this case easily eluded, and the necessity of personal protection by means of a prophylactic treatment will soon be urgently felt and acknowledged

CONCLUSION THE OFFICERS WHO ASSISTED IN THE BACTERIOLOGICAL INVESTIGATIONS IN INDIA

My Lord and Gentlemen, permit me, before I leave this place, to pay a tribute of gratitude for assistance and coöperation in the investigation work in India to the officers of the Indian and Bombay Governments, the Director General of the Indian Medical Service, Lieutenant-Colonel Owen, Major Bannerman, Major Lyons, Major Herbert, Captain Thorold Captain Hare, Captain James Captain Earle, Captain Milne, Captain Leumann, Dr (Miss) Corthorn, Dr Gibson, Dr Marsh Dr Balfour Stewart, Dr Ransome, as well as Dr W J Simpson, Dr Powell, Dr Mayr, Dr Surveyor, Dr Paymaster, Mr E H Hankin, the distinguished Bacteriologist of the North-West Provinces of India, His Highness the Aga Khan, and a number of other European as well as Indian gentlemen much too numerous to mention them all

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MEMORIAL TO THE LATE MR L P METHAM — At the annual meeting of the Royal Female Orphan Asylum, Devonport it was decided to perpetuate the memory of the late Mr L P Metham, M R C S Eng, L S A, who had been honorary secretary of the institution from its foundation, by raising a fund to be called the "Metham Endowment Fund" for the maintenance of five beds to be filled by children nominated from time to time by his two daughters

HOME FOR INEBRIATES —At the meeting of the Bristol Town Council held on June 14th it was decided to make a conditional grant of £2000 to the Royal Victoria Home for Inebriates at Brentry —The Cardiff Watch Committee at their meeting on June 14th decided to accept the offer of the authorities of the Inebriates Home at Brentry and to send patients there at a cost of £10 a year each, with 3s 6d per day for maintenance, such provision to be for not less than five inmates and for five years

The Cavendish Lecture

ON

THE ETIOLOGY AND DIAGNOSIS OF CEREBRO-SPINAL FEVER.

Delivered before the West London Medico-Chirurgical Society on June 16th, 1899,

BY WILLIAM OSLER, M D, F R S, F R C P,
PROFESSOR OF MEDICINE, JOHNS HOPKINS UNIVERSITY, BALTIMORE.

GENTLEMEN,—In practice we occasionally meet with a meningitis which is not tuberculous, which is not a complication of pneumonia or ulcerative endocarditis, and which is not a sequence of ear disease or of injury, and which is not a terminal infection in some chronic malady As the meninges of both brain and cord are diffusely inflamed we label the condition "cerebro-spinal meningitis" At intervals, in certain regions, the cases multiply and we then speak of epidemic cerebro-spinal fever Until recently my experience, though somewhat varied had been confined to a few instances in which the absence of the usual factors justified the diagnosis of the sporadic form of this disease Within the past year a small outbreak in Baltimore has enabled me to study certain points in the etiology and diagnosis of this most interesting affection and has thus determined my choice of a subject on which to address you

I —SUMMARY OF THE FEATURES OF CEREBRO-SPINAL FEVER AS AN EPIDEMIC

No fever attacks so few individuals in a community during its periods of prevalence, so that the general mortality may be but slightly increased On the other hand, scarcely any known fever kills so large a proportion of those attacked The recent epidemic in Boston illustrates this very well Of 111 cases in three hospitals 76 died, a mortality of 68 5 per cent The outbreaks occur in certain waves or periods, of which the fourth during the present century is at present prevailing in the United States For several years there have been local epidemics of the disease in widely separated regions, usually in villages in country districts, but in 1896, 1897, and 1898 a slight epidemic occurred in Boston and in the latter year cases began to be recognised in Baltimore and other towns. From a recent collective investigation, made under the direction of Surgeon General Wyman of the United States Marine Hospital Service,[1] we learn that cerebro-spinal fever has prevailed during the past year (as a rule in a mild form) in 27 States and in the District of Columbia. It is not possible to say that the movement of troops last summer had anything to do with the spread of the disease

Among specific diseases cerebro spinal fever stands in some points close to pneumonia The seasonal relations are the same in both and the two diseases may prevail together. The abrupt onset, the great frequency of herpes in both, the leucocytosis, "the almost identical characters of the fibrino-purulent exudate in the two diseases" (Netter), the frequent complication of pneumonia in epidemic cerebro-spinal fever and of meningitis in pneumonia are additional points of contact The degree of contagion is about the same in both diseases, and, lastly, it has been claimed that the organism described in cerebro-spinal fever is only a variety or a degenerate form of the pneumococcus On the other hand, Leichtenstern, speaking against the view that the pneumococcus is the cause of epidemic cerebro-spinal fever, says "Pneumonia is a disease spread over the entire earth and appears at all times there being no land immune from it. Epidemic meningitis is very rare and in many countries is still unknown Croupous pneumonia attacks every age, the predisposition increasing somewhat with increasing age, epidemic meningitis is a disease which affects children and young people, beyond 35 there is slight disposition to it. Croupous pneumonia has a typical course and a crisis, epidemic meningitis has no crisis The complications of the two diseases are different,' &c (Quoted by Councilman, Mallory and Wright[2])

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[1] Public Health Reports, vol xiv

[2] Epidemic Cerebro-spinal Meningitis A report of the State Board of Health of Massachusetts. Boston 1898.

numbering some 10,000 to 12,000 people, where about half of the total number were inoculated under the auspices of His Highness the Aga Khan A most comprehensive inoculation campaign and with widely reaching and most satisfactory results was carried out under the Collector of Dharwar by Captain Leumann, I M S, Dr (Miss) Corthorn, Dr Hornabrook, Dr Foy, Dr Chenai, and others in the three adjacent small towns of Hubli, Dharwar, and Gadag, where some 80,000 people were inoculated The latter was the most magnificent piece of work done, from the point of view of practical application of the method With the extension of the number of inoculated the exactitude and precision of observation must, however, suffer

A number of doubts and possible objections with regard to many particular points arise which it is not always possible to answer with certainty Such observations are required to enable us to judge whether the application of the method as a general measure answers to the expectations formed, but the exact extent of the results is to be gathered from such mathematically precise experiments, imitating the conditions of laboratory practice, as were those which I have detailed above The difference in the mortality from plague between inoculated and uninoculated parts of communities was estimated to average over 80 per cent, approaching often 90, as was the case in Undhera the lowest proportion ever observed in the experiments which I made personally having been 77 9 per cent This was at Kirkee

CASE MORTALITY REDUCED BY 50 PER CENT

A very accurate set of data were collected in almost all the larger hospitals where inoculated plague cases were admitted upon the fatality of the disease in the inoculated These were to the effect that the case mortality among the inoculated was some 50 per cent lower than among the uninoculated plague cases A number of documents on this point have been collected by the Indian Plague Commission and will appear, I trust, in their records

MINIMUM DURATION OF THE EFFECT OF THE PLAGUE INOCULATION

As to the duration of the effect of the plague inoculation the statement which can be made for the present is that it lasts at least for the length of one epidemic, which on the average extends from over four to six months of the year The Government of India have recognised the inoculation certificates, entitling the holder to exemption from plague rules, to be valid for a period of six months, with the understanding that if accurate data are forthcoming of the effect lasting longer the holders will be permitted to exchange their certificates for another period without being re inoculated

THE FURTHER PROBLEMS PURSUED IN THE BOMBAY PLAGUE RESEARCH LABORATORY

The task which the officers of the Bombay Plague Research Laboratory have proposed to themselves in connexion with the prophylactic inoculation comprises now the following problems (1) the working out of proceedings for turning out uniformly large quantities of material and avoiding the variations due to the character of the plague microbe and to the differences in the composition of the cultivation media, (2) the further investigation of the different constituents of the plague prophylactic with a view of enforcing those which produce definite and beneficial results, (3) the possible mitigation of the reactionary symptoms after inoculation, and (4) the study of the effect of antiseptics used for preserving the prophylactic, while their most important general problems concerning plague refer to the study of the curative treatment of plague and to the life history of the plague microbes in nature

THE TYPHOID INOCULATION

Permit me now to enter a pledge in favour of a new inoculation campaign which has been inaugurated already and which I hope will be carried out successfully for the benefit of a very large number of soldiers of this country residing in India, and of white men in general in all tropical countries The problem of typhoid inoculation has quite a special interest for Europeans as much as cholera has for the natives of India Typhoid fever proved to be a more difficult disease to eradicate from military cantonments than cholera It is possible that the explanation of that lies in what is already known of the character of the microbes of these diseases The typhoid bacillus when subjected to different chemical and physical agents, such as acids or antiseptics, or a high temperature, or desiccation, or the admixture of other microbes, appears far more resistant than the cholera microbe Such a character would ensure for the typhoid bacillus the existence in more varied media under more various climates and a greater independence from seasonal or local changes than is the case with the cholera microbe Outside the endemic area the cholera remains in one and the same place for a few weeks and in any given part of a town often for a few days only It is rare that it visits one and the same barrack more than once in five years, sometimes ten years, and when it occurs a temporary evacuation of the place puts a stop to the disease The typhoid virus, on the contrary, sticks to an infected locality for years and causes a continuous incidence of the disease, for which occasionally nothing short of a complete desertion of the station is effective At the same time, while the cholera infection seems to be almost exclusively confined to the water supply, in typhoid fever the improvement of the water seems to leave intact a large number of other sources of danger which up to the present time have escaped recognition Differing thus in their life-history in nature, the bacilli of cholera and typhoid fever present important common features in the manner in which they behave in the human and animal body The chief centre of infection in both instances is the intestinal canal, the circulatory system remaining free from invasion When inoculated into animals both microbes admit of the same kind of transformation by passages from animal to animal, and against both immunity can be created in the laboratory by the same preparation of virus as used in the inoculations for cholera, while when examining the tissues of immunised animals the same modifications are detected in them as those observed after the anti-cholera inoculation These considerations have led us to expect from the typhoid inoculation in man a similar protective effect as that observed in the inoculation against cholera, and seeing that the period of life during which the new comers to India remain susceptible to typhoid fever extends only over a few years it seems that the application of the system, when properly organised, is likely to prove of a very high practical value.

INOCULATION AND GENERAL SANITARY MEASURES

The anti cholera inoculation, the inoculation against plague and that against typhoid fever came to associate themselves to vaccination and represent attempts at dealing with epidemics on lines differing from measures of general sanitation During the last few years the question was therefore frequently debated as to the relation in which the two stand to each other It is scarcely necessary to say that inoculation cannot be substituted for a good water supply, the draining, cleansing or improvements in the building of cities, or for the admission of a larger amount of light and air into overcrowded localities, for all those measures to which the nations owe such a wonderful improvement in health as has taken place during the present century Only injustice would be done to the sanitarian by calling him in when a patient lies already on his sick bed or when an epidemic actually breaks out in a community, and by asking him to stay the sickness or the epidemic, to improve the health of the population, so to say, while you wait Epidemics, like individual diseases, require specifics, promptly administrable remedies, to be dealt with, and measures of general sanitation can be no more advised for arresting an outbreak of cholera or plague than can an individual patient be directed to build for himself a new house, or to dry up the marshy lands, or to cut down the jungle round his habitation when he requires a dose of quinine to arrest an attack of fever The part of vaccination and of preventive inoculation in combating epidemics stands in the same relation to general sanitary measures as therapeutics and the art of the healing physician do to domestic hygiene It is certain that neither of these can ever be substituted for the other

INOCULATION AND THE SEGREGATION DISINFECTION METHOD

A comparison of a different kind now very actively discussed is that between the methods of combating epidemics by separation of sick and healthy and disinfection on the one hand and by preventive inoculation of the people on

tuberculous, syphilitic, and cerebro-spinal fever An etiological classification, possible to-day in part, is of necessity incomplete In the annexed diagram I have made a provisional grouping of the chief forms —

Acute Lepto-Meningitis — Primary	1. Of cerebro-spinal fever	(a) Sporadic. (b) Epidemic.	Diplococcus intracellularis
	2. Pneumococcic.	Meninges alone involved or in a general pneumococcus infection.	Pneumococcus.
Acute Lepto-Meningitis — Secondary	1. Tuberculous	... .	Bacillus tuberculosis.
	2. Pneumococcic.	(a) Secondary to pneumonia, endocarditis, &c. (b) Secondary to disease or injury of cranium or its fossa.	Pneumococcus.
	3. Pyogenic	(a) Following local disease of cranium or a local infection elsewhere (b) Terminal infection in various chronic maladies.	Various forms of staphylococci and streptococci.
	4. Miscellaneous acute infections.	In typhoid fever influenza, diphtheria, gonorrhœa, anthrax, actinomycosis and other acute diseases.	Typhoid bacillus, influenza bacillus diphtheria bacillus, gonococcus, &c.

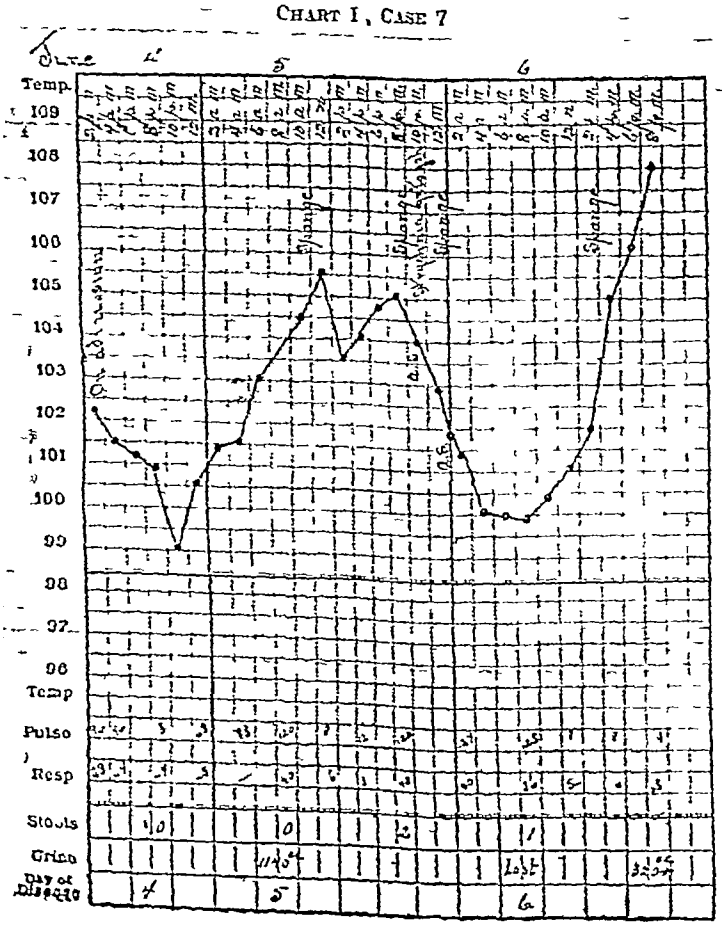
The acute primary lepto-meningitis in a large proportion of all cases follows an infection with the diplococcus intracellularis or the pneumococcus It will be a great gain if Still's observations (to which I shall refer later) on the posterior meningitis are confirmed. I do not know where Quincke's meningitis serosa should come in an etiological grouping To the secondary forms of meningitis in the table I shall not refer except to call attention to the importance of the pneumococcus in this group also, nor can I discuss within the limits of this lecture the clinical features or the varieties of meningitis, and must confine my remarks to a few special points in the diagnosis of cerebro-spinal fever and to a consideration of certain sporadic forms of meningitis

1 *Certain features in the symptomatology of cerebro spinal fever* —No other form of meningitis presents a symptomatology of the same fulness—general, cerebral, spinal, and peripheral features are present in almost every case This results in part from the extent of the cerebro-spinal involvement, in part from the very frequent implication of the nerves, and to some degree is a consequence of the very chronic course I shall discuss only a few of the important symptoms

(*a*) *Onset* —In striking contrast to other forms, particularly the tuberculous, cerebro-spinal fever sets in abruptly Without warning, while at work, or awakening the patient from a sound sleep, comes the pain in the head, &c This peculiarity may also be met with in primary pneumococcic meningitis, but in the form secondary to pneumonia and in that which arises in endocarditis latency of onset is the rule

(*b*) *Fever* —There is no constant type of fever in any form of meningitis In cerebro-spinal fever the pyrexia is very variable and I have given here a few charts in illustration There may be no fever at onset—as shown in Charts VIII. and IX of the sporadic cases Of our epidemic cases all had fever on admission Irregularity in the fever may be present from the start There is not a steady rise at first to a fastigium, but even on the third or fourth day the temperature may fall to normal Chart I shows this extreme irregularity in a two-hour record The remissions were very pronounced and the temperature rose to 108° just before death In other cases the course is singularly like that of typhoid fever and for days the two-hour temperature chart may not show a variation of more than a degree This is well illustrated in Chart II from Case 17 This patient had the facial aspect of a case of typhoid fever Chart III from Case 13 shows also a very steady fever with but slight remissions to the time of death on the fifteenth day Chart IV from Case 15 presents a still more marked resemblance to a typhoid fever curve particularly in the daily remissions, giving the spiked chart with which we are all so familiar in the third week of the disease. Intermissions, exacerbations, and great irregularities similar to those in tuberculosis are very pronounced in the more chronic cases Chart V from Case 18 gives the maximum and minimum daily temperature from the twenty ninth to the seventy ninth day It will be noticed how variable is the time of the highest point of daily fever On 13 days the maximum temperature was in the morning—an inverse type, to which many writers have referred, in this disease The exacerbations are better shown in a two-hour record In Chart VI from Case 15 the intermittent type is shown, but the paroxysms are readily distinguished from those of tertian malarial intermittent fever by their prolonged course

CHART I, CASE 7



In cases of this sort, when chills occur, the picture is very suggestive of malaria and one can understand why some of the older writers regarded the disease as a manifestation of paludism. The chart of Case 8 is worth a passing comment After a very steady temperature on the ninth, tenth and eleventh days the record on the twelfth day was normal. On the thirteenth day there was a paroxysm without a chill, lasting from 10 P M on June 19th to 4 A M on the 21st. On the fourteenth and fifteenth days the temperature was normal On the evening of the latter the fever rose and the paroxysm lasted through the sixteenth day, and at 4 P M the patient complained of decided chilliness On the seventeenth day there was no fever At 10 A M on the eighteenth day the patient had a rigor in which the temperature rose to 104 5°F, the paroxysm lasted more than 30 hours Then, on the twentieth twenty first, and twenty second days he had recurring attacks, two with chills, the one on the twenty second, without chill, extended into the twenty third day. After this the patient's temperature remained normal and he recovered rapidly During these attacks he complained a great deal of pain in the head and back. The spleen was not enlarged The blood was

II —BACTERIOLOGY OF CEREBRO-SPINAL FEVER

Until within the past few years the etiology of cerebro-spinal fever has been obscure and a majority of observers regarded the organism found in the meningeal exudate as the pneumococcus or a variety of it More than 12 years ago, however, Weichselbaum described a diplococcus with special cultural peculiarities which he regarded as the specific organism of the epidemic form of the disease Little or no attention was paid to his communication until 1895, when his observations were confirmed by Jaeger So little notice, indeed, had they attracted that neither Ormerod in Allbutt's "System" (vol i, published in 1896), nor Latimer in Loomis and Thompson's "System" published in 1897, mention Weichselbaum's organism The work of Heubner[3] in Germany, and more particularly the studies of Councilman, Mallory, and Wright, have fully confirmed the observations of Weichselbaum, whose organism, known variously as the meningococcus and the diplococcus intracellularis meningitidis, is now regarded as the specific cause of the disease As the bacteriology of the subject is very fully discussed in the monograph by Councilman and his associates and in the just issued article by Netter in vol xvi of the "Twentieth Century Practice" I shall confine my remarks to an account of our experience in the study of the cases which have been in my wards during the past year To Dr Norman B Gwyn, who has charge of the bacteriological work in my clinical laboratory, and to Dr N McL Harris, bacteriologist in the pathological department of my colleague, Professor Welch, I am under special obligations for their careful study of the cases during life and after death The meningococcus in cover slips made from the exudate has usually a diplococcus form and lies within the polynuclear leucocytes, hence the definition "intracellularis" Many of the cells may be stuffed with them They may also occur free It stains with the ordinary staining reagents and is decolourised by the Gram method It grows best on Löffler's blood serum, on which it forms "round, whitish, shining, viscid looking colonies with smooth, sharply defined outlines which attain a diameter of one to one and a half millimetres in 24 hours" (Councilman) In cultures it is usually short-lived, but Netter states that Germano has found that it resists desiccation and has preserved its vitality to the end even of 90 days He states also that Neisser has shown that the organism is transportable by atmospheric currents, even the most feeble, and that it is very susceptible to aerial convection It is found in the cerebro spinal exudate, rarely elsewhere in the body, but it has been isolated from the blood, the pus from the joints, the pneumonic areas in the lungs, and the nasal mucus The organism is feebly pathogenic for animals Rabbits and mice resist subcutaneous inoculation Heubner and Councilman and his associates have produced typical meningitis by inoculating cultures of the meningococcus beneath the spinal membrane of goats Our clinical and pathological experience with the organism is as follows In 21 cases which I have seen the lumbar puncture was made in 16 In three patients seen in consultation the diagnosis seemed to be so clear that lumbar puncture was not made In Cases 1 and 2, both mild, the puncture was made, in one on the seventh day and in the other on the sixth, but no organisms were found Cases 3 and 4 were admitted late in the disease and it was not thought necessary to perform it Of the remaining 14 cases, in 13 the diplococcus intracellularis was present on cover slips and in cultures In the remaining cases its presence was doubtful on the cover slips and the staphylococcus grew in culture Of the cases which came to necropsy, five in number, the bacteriological results, as given by Dr Harris, are as follows Necropsy No 1104, meningitis, meningococcus, the pneumococcus from a pneumonic area in the lung No 1189, a case with extensive arthritis, in which the diplococcus intracellularis was found in the blood and joint tissues during life, as well as from the meninges Post mortem, the meningococcus was separated in pure cultures from the cord and brain, and from the lung the pneumococcus and the bacillus lactis aerogenes, and from the blood in the coronary arteries the pneumococcus The other organs were sterile In Case 10 (Necropsy No 1247), on which laminectomy had been performed the spinal meninges at the time of death (about two months later) were perfectly normal At the operation the staphylo pyogenes grew from the culture In No 1314, a c which laminectomy was performed, the meningococc isolated from the meninges both during life and after The bacillus coli communis, the bacillus lactis aer and the staphylococcus pyogenes albus were also iso from a broncho pneumonic area in the lung the p coccus and the staphylococcus pyogenes aureus, fr spleen the staphylococcus pyogenes citreus, and thrombus in the superior longitudinal sinus and fr pelvis of the left kidney the streptococcus septicus faciens (Sternberg) This case had a diphtherit hæmorrhagic cystitis No 1364, a very protracted which death occurred in the twelfth week and from the meningococcus had been isolated from the spin twice, from the meninges post mortem the streptococc genes and the bacillus coli communis were isolated, staphylococcus pyogenes aureus and the bacillus co munis from the broncho-pneumonic areas in the lun a fatal case outside the hospital the meningococc pneumococcus, and the bacillus coli communis g cultures from the cerebral meninges There was no f pneumonia in the lungs.

[Dr Osler here said that in the first cases the c method recommended by Councilman was follo namely, the use of blood serum "slants" Such was to be almost useless on account of contaminating orga for out of a series of eight tubes only one gave cultures In the other cases the exudates and fluid plated out in alkaline 5 per cent glycerin agar, a pro which gave entire satisfaction He then consider subject of microbic association in cerebro-spinal fev continued]

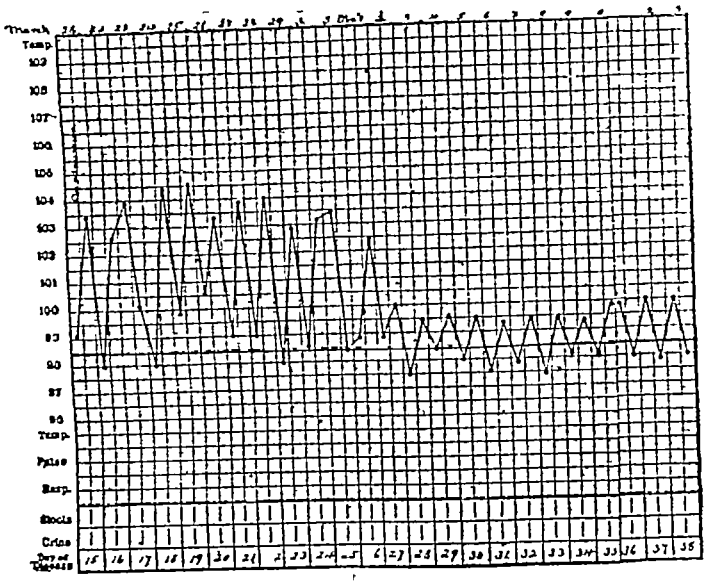
On the whole, then, our observations support th Weichselbaum, Jaeger, Heubner, Councilman, and c that in epidemic cerebro-spinal fever there is an org with special cultural peculiarities which may reasonal regarded as the exciting cause of the disease. Netter observers, seems to doubt this and say among recent observers, seems to doubt this and say he only found the diplococcus intracellularis in 16 out cases, and in 10 of these in a pure statement in the "Twe same time His most recent statement in the "Twe Century Practice" (1899) is worth quoting "Certa servers, and more particularly Jaeger and Heubner, b that the diplococcus intracellularis is the sole patho agent in epidemic cerebro spinal meningitis and tha pneumococcus has no influence whatever in the production of this true epidemic meningitis Councilman is not to be thought phatic, although he appears disposed to admit this at least thinking I do not, however, in any way accept the pne The pneumococcus can, without any doubt cause a wasting and in spite of Heubner's experience the rôle of the arti coccus has been most surely established experimentally. Netter's position is most illogical Throughout the article, the "Twentieth Century Practice"—in many ways the very best in literature—he assumes that the disease, cerebro-spinal fever, may be caused either pneumococcus or the diplococcus intracellularis That primary cerebro-spinal meningitis may be due to the pneumococcus is universally acknowledged, but it is in the highest degree unlikely that a remarkable specific affection like cerebro spinal fever should be caused by two different organisms Towards the close of the article the inconsistency of this view seems to impress him, for he says that certain peculiarities "prevent us from concluding that the two diseases (i e, pneumonia and cerebro-spinal fever) are absolutely identical"

III —DIAGNOSIS OF CEREBRO-SPINAL FEVER

Meningitis is not always easy to recognise clinically. Mortifying post-mortem disclosures are even more common with it than with pericarditis The unexpected meningitis of pneumonia, of Bright's disease and of other chronic affections teaches us how latent may be the process, on the other hand, who has not in typhoid fever and in pneumonia made a positive diagnosis of meningitis and has found post mortem the cerebro spinal membranes perfectly free? Sooner or later the truth of Stokes's dictum is brought home to each one of us "There is no single nervous symptom which may not and does not occur independently of any appreciable lesion of the brain nerves, or spinal cord" The anatomical classification of lepto-meningitis is not very satisfactory and, as I have stated, there is great lack of uniformity in the terms employed The nomenclature of the Royal College of Physicians of London recognises four groups—purulent,

[3] Jahrbuch für Kinderheilkunde, 1891 and Deutsche Medicinische Wochenschrift, 1897

CHART IV, CASE 15



in only three was a leucocytosis absent The lowest count was 6500 per cubic millimetre Of eight cases with leucocytosis there were four with 20,000 or more white corpuscles per cubic millimetre The highest count was in a child, aged eight years, 24,333 per cubic millimetre Altogether the leucocytosis seems not to be so high or so persistent in the tuberculous meningitis

(*c*) *Arthritis*, or more often peri arthritis, much more common in cerebro-spinal fever than in other forms, was present in two of our cases In Case 7 the joint lesion came on with great rapidity and by the fourth day the patient had a multiple suppurative arthritis resembling an acute pyæmia The diplococcus intracellularis was isolated from the pus in the joints In the other (Case 10) the disease began with arthritis [1]

2 *Kernig's sign*—Described by a Russian physician and studied in Germany and France, this interesting sign has not attracted the special attention of English and American physicians, though J B Herrick of Chicago at the last meeting of the Association of American Physicians spoke of its value It has been present in all of our cases in which it has been looked for It is, I think, an old observation that the subjects of protracted meningitis, particularly children, very often

CHART V, CASE 16

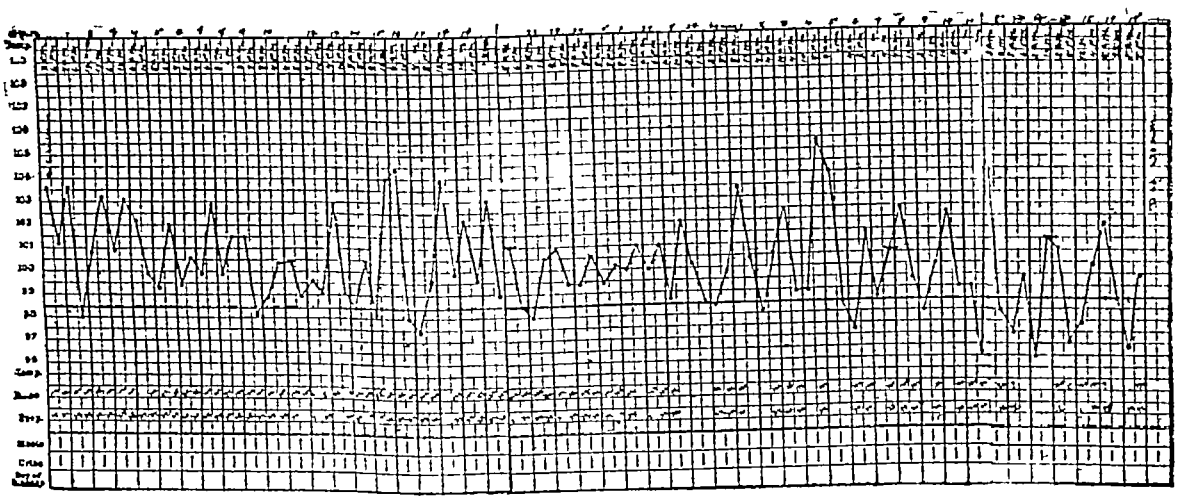
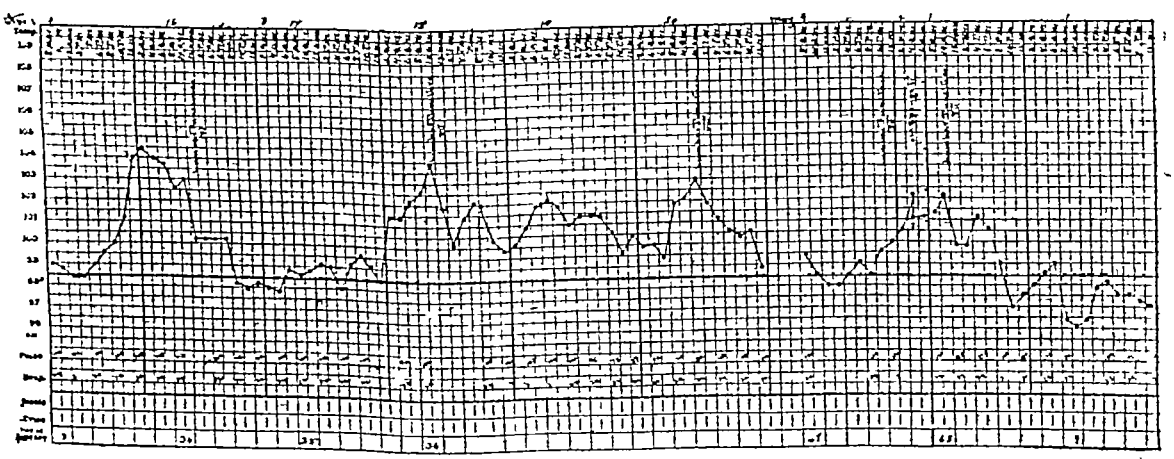


CHART VI, CASE 15.



[1] A full report of these cases is given in the Boston Medical and Surgical Journal, Dec. 29th 1898

examined daily for the malarial parasites but none were found And lastly, Chart VII from Case 15 illustrates the relation of the lumbar puncture to the temperature After the sixth, seventh, and eighth puncture the fever dropped, after the twelfth it rose

(*c*) *Skin rashes* —Various skin rashes are common in cerebro-spinal fever and form an important feature in the diagnosis Of 21 cases which I saw during the epidemic, in 13 a skin eruption of some form or another was present Herpes—of course, the most common—was present in eight cases A diffuse erythema about the chest and abdomen and over the joints was present in four cases Petechiæ were noticed in eight cases, extensive in only three In three cases a very remarkable and peculiar rash was present in the neighbourhood of the joints, particularly over the extensor surfaces of the knees and elbows and about the ankles There was a diffuse, livid erythema of great intensity on which a purpuric herpes developed—a vesicular rash the individual vesicles of which became filled with blood As the erythema faded and the vesicles dried they could be felt as little nodular hemispherical bodies which persisted for a week or 10 days.

(*d*) *Blood* —A careful study of the blood was made in all our cases A leucocytosis was present in every instance In four the first blood count was made on the third day and the leucocytosis was 25,900, 14 500, 40,800, and 32,000 per cubic millimetre The first blood count was made on the fourth day in four cases and the leucocytosis was 26,240, 31,800, 19,300, and 7600 per cubic millimetre. In only four cases did the leucocytes exceed 40,000 per cubic millimetre and the maximum count was on the ninth day in a fatal case 47,000 per cubic millimetre The leucocytosis persists even in the most protracted cases In a lad who died in the twelfth week of the disease the leucocytes were 23 000 per cubic millimetre shortly before death As a rule there was no special reduction in the red blood corpuscles In one case a moderate anæmia developed and in the fifth week the red corpuscles were only 3,100,000 per cubic millimetre In one case the diplococcus intracellularis was isolated from the blood during life Leucocytosis has no special value in the differential diagnosis of the various forms of meningitis I had an impression that it was not so constant in the tuberculous variety but Dr Parfitt analysed the records of 11 of our cases and found that

CHART II, CASE 17

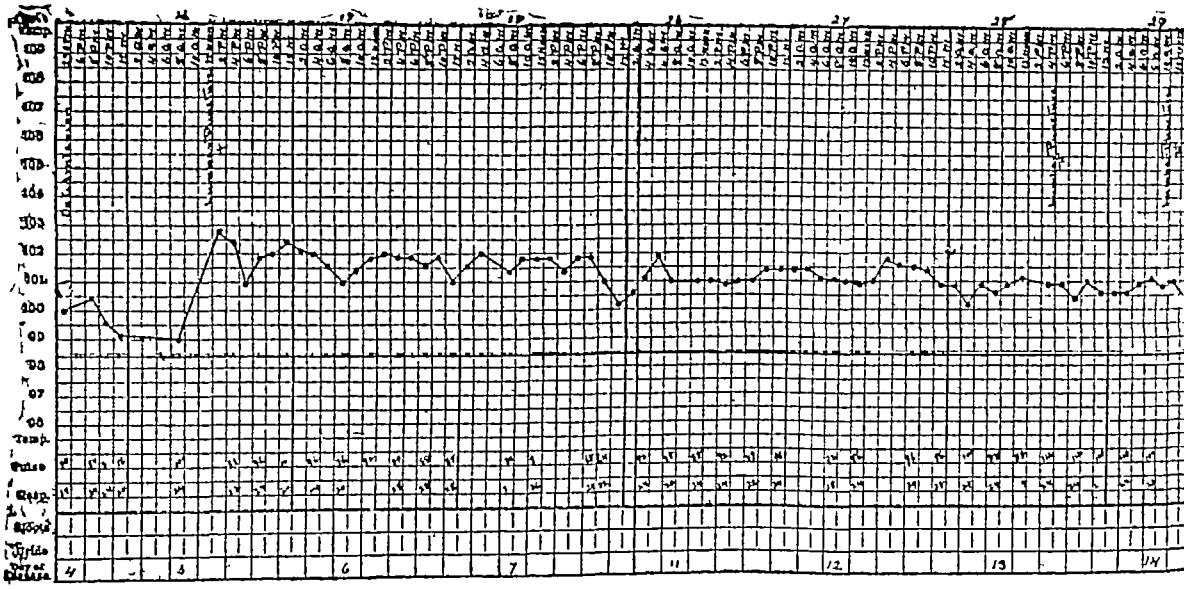
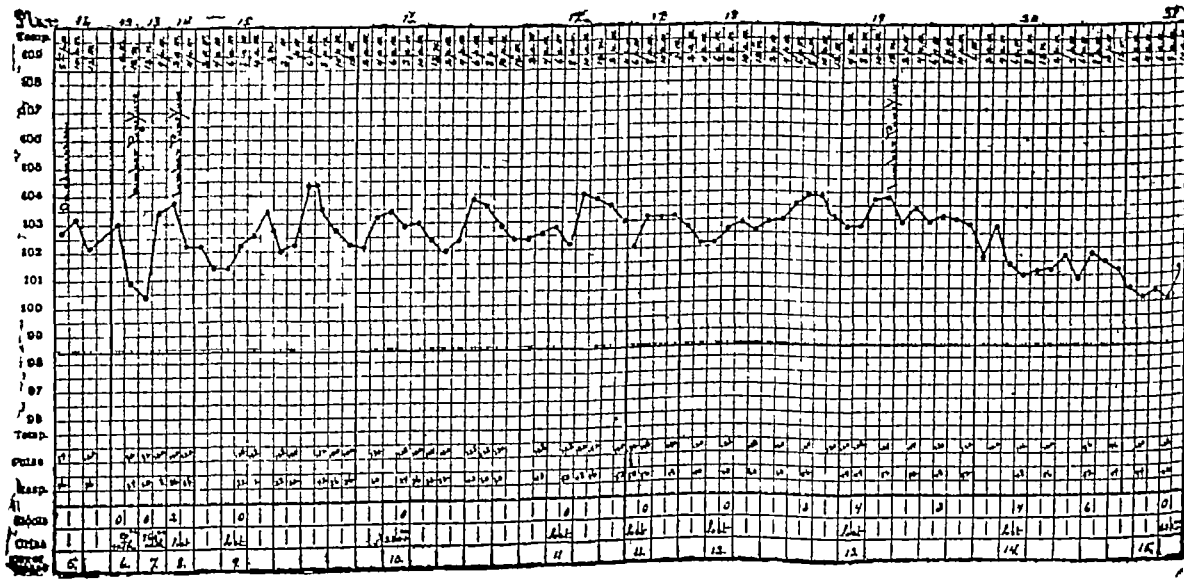


CHART III, CASE 13



medium The amount of fluid obtained varies from a few drops to 130 cubic centimetres The samples in these flasks show the large amount which may be removed—one 126 cubic centimetres, another 112 cubic centimetres

Wentworth claims that within certain limits there is some relation between the degree of turbidity of the fluid and the severity of the symptoms, and this was borne out by our more limited experience Even in the most protracted cases the turbidity may persist. Only once was a clear fluid removed in an exacerbation On several occasions a bloody fluid was removed in Case 18 In the wards at the same time was a remarkable instance of septic meningitis in which, after turbid fluid had been withdrawn at one puncture, at a subsequent one, before death, blood flowed from the needle, and post mortem there was extensive meningitis and a rupture of the basilar artery with hæmorrhachis The number of the organisms found bears no constant relation to the intensity of the symptoms In acute cases they are present, as a rule, in large numbers The later the disease the less likelihood is there to find the diplococcus intracellularis in the fluid, but we have found them in the second, third, fourth, fifth, and seventh week The following are some of the days on which the organisms were found seventeenth day, fourteenth day, twenty fifth day, thirty first day forty first day, and nineteenth day

Has the lumbar puncture any therapeutic value? Williams of Boston states that he has seen beneficial effects and there are a few cases in the literature in which the severity of the symptoms were promptly mitigated by the removal of a variable amount of the spinal fluid. Wentworth (whose experience has been very large), speaking of these cases, says "I have never seen any such cases, though constantly on the watch for them A temporary relief, lasting for a few hours, has followed the operation in a few cases, but the same remissions frequently occur without any treatment" Netter says that he has seen convulsions which had lasted for a long time without intermission cease after the withdrawal of only about two drachms of fluid We have given this point our closest attention and many times have performed the puncture directly for its supposed benefit In Case 8 the note reads "Much better after the first puncture, brighter every way" Case 9, puncture at 11 A M 'Patient's condition has greatly improved, the muttering has ceased and the irregular movements are less marked." To Case 16 I may refer more fully It was an example of the chronic form in which the patient lingered for nearly three months The accompanying table has been prepared by Dr Marshall, one of my house physicians

cells and intracellular cocci in abundance, and the cultures were positive In all, 17 punctures were made between the twenty ninth and the seventy fifth day of the disease, of which 14 were positive A turbid pale yellow fluid was removed at each tapping On five occasions 100 cubic centimetres or more were obtained, once 125 cubic centimetres and once 126 cubic centimetres Following the first two effective tappings the patient appeared to be better, the temperature dropped, and he seemed much brighter, but he soon became worse and the fever rose Following the sixth, seventh eighth, and eleventh punctures the temperature fell 4 5°, 3 8°, 4 2°, and 5 8° There was no change in the general condition, though he sometimes was a little brighter and the drop in fever followed so directly that it seemed only natural to attribute the good results to the lumbar puncture The thirteenth puncture, however, was negative, yet the temperature fell 5 1°, and after the fourteenth tapping the temperature rose 2 6° Evidently not the withdrawal of the fluid but the peculiar character of the disease already spoken of was responsible for the remissions The chart illustrates further the persistence of the leucocytosis and the sterile characters of the fluid after the forty fourth day I have here for demonstration the lumbar portion of the cord and its membranes The position of the last puncture can be seen and the repeated operations have caused a slight hæmorrhagic pachymeningitis

IV —SPORADIC CEREBRO-SPINAL FEVER

[Dr Osler here discussed the nomenclature of the varieties of meningitis and mentioned that in the United States and Canada the occurrence of sporadic cases of cerebro-spinal fever in the intervals between epidemics had long been recognised He continued]

In Baltimore the figures for the past six years are as follows 1893, 59 cases, 1894, 26 cases, 1895, 27 cases, 1896, 32 cases, 1897, 22 cases, 1898, 70 cases, during this year the prevalence of the disease was recognised as occurring in a mild form through the city During the first four months of the present year there has been an increase and the deaths for this period have been 27

Sporadic cerebro-spinal fever at the Johns Hopkins Hospital —In the spring of 1898 the first cases of the epidemic form were admitted to hospital and in all 18 cases have been under treatment Prior to this date only four cases had been admitted which we regarded as sporadic forms of cerebro-spinal fever three within a few days of each other in 1893, and one, a chronic case, in 1892, which has been reported [6]

CASE 16 —LUMBAR PUNCTURE CHART

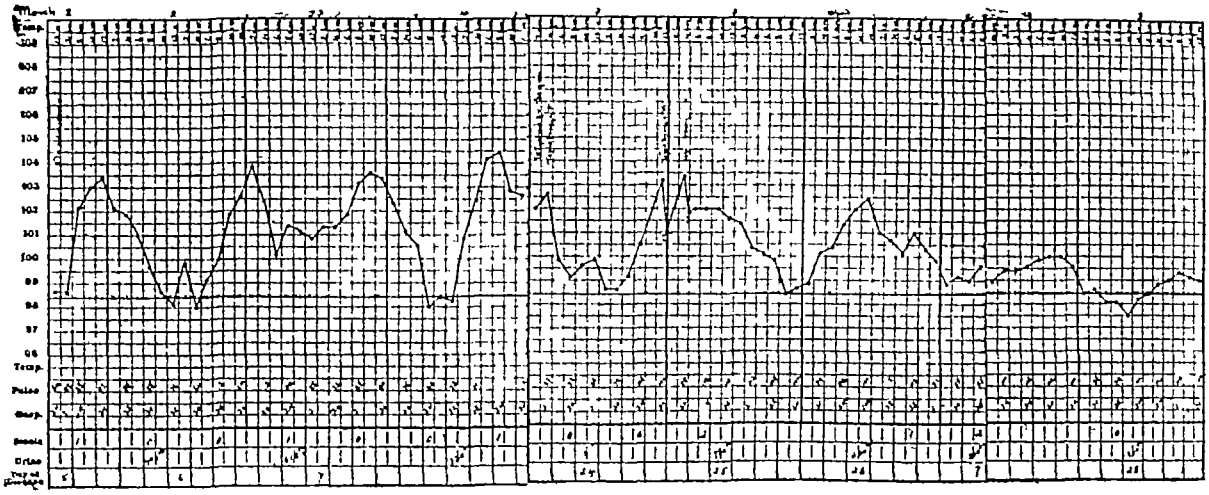
Puncture No.	Day of disease.	Amount.	Character	Microscopically	Cultures.	Leucocytosis.	Temperature
1	29	Negative	—	—	—	—	Unchanged.
2	31	100 c.c.	Yellow turbid.	Pus cells intracellular diplococci.	Positive	17 400	Dropped 2 4°
3	35	125		—		25,300	1·0°
4	37	90	Pale yellow turbid	Pus cells no cocci	Negative.	19,900	2·0°
5	40	65	Pale yellow	"		28 000	1·0°
6	44	126	Pale yellow cloudy	Intracellular diplococci.		15,000	" 4·5°
7	46	100 "	Pale yellow turbid	Pus cells no cocci.		22,000	" 3·8°
8	48	50	"			19,000	" 4·2°
9	54	30	"	"		23,600	Rose 0·8°
10	59	Negative.	—	—	—	—	Unchanged.
11	59	100 c.c.	Cloudy	Pus cells no cocci.	Negative.	—	Dropped 5·8°
12	62	60	Cloudy blood tinged.	"		18,000	" 3 4°
13	68	3 "	—	—		32,000	5 1°
14	70	75	Cloudy	Pus cells no cocci.	"	47,500	Rose 2·6°
15	73	Negative.	—	—	—	23,000	Unchanged.
16	75		—	—	—	—	
17	75	8 c.c.	Cloudy	Pus cells no cocci.	Negative.	—	"

It gives the day of the disease, the amount of fluid withdrawn, the character of the exudate, the microscopical appearances the culture results the leucocytosis, and the effect (1) of the puncture on the temperature The first puncture, made on the twenty ninth day of the illness, was negative. From the second puncture 100 cubic centimetres of a yellowish turbid fluid were withdrawn which contained pus

CASE 1.—A man (Hospital No , 7253), aged 57 years, was admitted on May 1st 1893 The patient had been drinking heavily and when admitted was delirious, mumbling and muttering to himself, and picking at the bedclothes, and he resisted actively any attempt to examine him His friends

[6] Johns Hopkins Hospital Bulletin, 1892.

CHART VII, CASE 15



lie with the thighs flexed upon the abdomen and with the legs in a state of partial contracture, so that they are with difficulty extended To test for Kernig's sign the patient should be propped up in bed in the sitting position, then on attempting to extend the leg on the thigh there is contraction of the flexors which prevents the full straightening of the leg On the other hand, in the recumbent posture the leg can be fully extended Many patients with meningitis are not in a condition to sit up and the test can be equally well made by flexing the thigh on the abdomen, when on attempting to extend the leg if meningitis be present, the limb cannot be fully extended, as shown in Fig 1 Fris found the sign in

FIG 1

Kernig's sign, showing the strong contraction of the flexors on attempting to extend the leg

53 of 60 cases and Netter in 45 of 50 cases It is stated to be present in all forms of meningitis when the spinal meninges are involved The presence of the sign is no indication of the intensity of the spinal involvement, as it existed in a very marked degree in a recent case of pneumococcic meningitis in which there was no positive exudate on the spinal meninges, only a turbid fluid Netter's explanation of the phenomenon is as follows "In consequence of the inflammation of the meninges the roots of the nerves become irritable and the flexion of the thighs upon the pelvis when the patient is in the sitting posture elongates, and consequently stretches, the lumbar and sacral roots and thus increases their irritability The attempt to extend the knee is insufficient to provoke a reflex contraction of the flexors while the patient lies on his back with the thighs extended upon the pelvis, but it does so when he assumes a sitting posture"

3 *Lumbar puncture* — During the past 10 years no single measure of greater value in diagnosis has been introduced than Quincke's lumbar puncture We are now able in a large number of cases to make a prompt decision as to the existence of meningitis and are further enabled to recognise the form of the disease I shall not detain you with details of the technique, available now in all text-books, and recently considered at great length in an elaborate "Referat" by Neurath [5] It is a simple, quite harmless procedure and in a majority of the cases can be done without general anæsthesia or with the aid of a local freezing mixture A dry tap is rare in cerebro-spinal fever, the needle may be plugged with fibrin or a nerve root may come directly against the orifice Puncture in the third or fourth interspace may be negative, while in the second a free flow is secured In one of our early cases in which no fluid was obtained the necropsy showed an exudate as thick as butter, with little or no fluid A first puncture in a case is very often negative Though simple, the technique is, like other procedures of the kind, bettered by practice Very often at first a few drops of blood flow, then a clear or turbid fluid, either drop by drop or sometimes in quite a strong stream The fluid may be clear, turbid, purulent, or more rarely a brownish yellow or quite bloody In a great majority of the cases when meningitis is present the fluid is turbid In rare instances clear fluid may be obtained when meningitis exists and in a protracted case the fluid may be turbid at one puncture and clear at the next Several observers have noted that the fluid may become clear in the intermissions of the disease A clear fluid may be obtained from a puncture in the second lumbar interspace, while lower down a turbid fluid may be withdrawn I saw this possibility very well illustrated in a recent necropsy, the fluid in the lower dorsal and upper lumbar regions was perfectly clear while that in the lower lumbar and the sacral regions of the canal was very turbid and contained numerous flocculent masses The fluid should be allowed to flow into a sterilised test-tube When the fluid is at all turbid there is usually a slight sediment and a coagulation of fibrin Cover glass preparations are made either directly from the turbid fluid or, if the turbidity is slight and the cell elements few in number, after it has been centrifugalised Cultures should be prepared at the time of making the lumbar puncture by allowing one or two cubic centimetres of the fluid to flow on to a Löffler blood serum

5 Centralblatt für die Grenzgebiete der Medizin und Chirurgie, Band I

looked perfectly normal. It was impossible to say where the dura mater had been incised and there were neither adhesions nor areas of thickening on the pia arachnoid There were extensive changes in the cord itself and in the nerve roots In Case 12 laminectomy was performed on the fourth day by Dr Cushing The patient was very ill and the spinal symptoms were especially pronounced. A catheter was passed beneath the dura mater and the membranes were drained and irrigated with salt solution For several days the patient seemed much better He developed a hæmorrhagic cystitis and pyelo nephritis, and died on the sixth day after operation Dr Musser of Philadelphia has also had an unsuccessful case Dr Rolleston and Mr Herbert Allingham have reported[11] a case of sporadic cerebro-spinal meningitis in which the patient recovered after laminectomy and drainage On the principle of a desperate remedy for a desperate disease the operation (which has been criticised adversely in an editorial note in the *Philadelphia Medical Journal*) seems justifiable in certain severe cases, in which, as in our first case, the spinal symptoms are very marked

TWO FURTHER INSTANCES OF EXTRA-UTERINE (ONE TUBAL AND ONE OVARIAN) GESTATION IN WHICH RUPTURE OCCURRED BEFORE THE END OF THE FIRST MONTH, OPERATIONS[1]

BY HASTINGS GILFORD, F R C S ENG

IN THE LANCET of Feb 20th, 1897, I wrote an account of two cases of ectopic gestation in which rupture of the sacs took place in the third week Both of these were attended with such severe symptoms that life was endangered In one it was necessary to remove the sac. In the other the patient recovered without operation At that time I was able to find reference to only half a-dozen cases of rupture at such an early date and of some of these I could get no particulars Since then Mr Taylor has dealt with the subject of early rupture in his Ingleby Lecture,[2] though apparently in none of the examples he mentions did rupture take place within the first month of pregnancy Orthmann[3] has also described a case in which it occurred within this period, and still more recently Dr Benham[4] has given details of a case in which the sac ruptured before the end of the third week In the former of these two removal of the sac was followed by recovery, but in the latter death took place from hæmorrhage The last reference to the accident is by Dr Blacker[5] who wrote that there is a specimen in the Museum of University College which "consists of the uterus and appendages of a young woman who is said to have menstruated three weeks previously The right Fallopian tube at about one inch from its abdominal end is dilated into a small cyst half an inch in diameter forming the sac of a ruptured tubal gestation The patient, an unmarried nullipara, died from hæmorrhage within a few hours" Further search would no doubt bring to light other instances of early rupture but their proportion must be very small when compared with those of recorded rupture of later date It is certain that many more cases take place than find their way into the medical journals There is indeed reason to believe that they are by no means rare, but are of more frequent occurrence than those which happen after the first month of gestation Moreover their non publication is not entirely due to their being less dangerous, for, as the above mentioned cases will show the symptoms to which they give rise are sometimes of the most dangerous description In all those which I have seen the patients were in grave peril and in at least two of them would probably have died had not the source of bleeding been dealt with by operation The only conclusion which can be arrived at is that many cases of this accident are not published for the simple reason that they are not recognised but are considered to be some other morbid condition. This being the case it will be worth while to inquire into the causes of the non recognition of such a well defined and important accident or disease

In the first place, it is probable that one of the chief explanations is to be found in the unsatisfactory state of opinion on the pathology of pelvic hæmatocele While the older writers thought that hæmatocele was rarely connected with extra uterine pregnancy it is now widely held that nearly all hæmatoceles are the result of that cause One effect of the former view was that in cases of pelvic hæmorrhage the idea of pregnancy was not so much as entertained unless it had advanced to such a stage as to be obvious at the first glance, but at the present time the opinion of many is that hæmatocele is so often due to extra uterine pregnancy that other causes may be neglected Moreover, it is regarded that the two (hæmatocele and pregnancy) are almost inseparable—that the one hardly ever occurs without the other Now there is reason to believe that this opinion is incorrect in both directions and that it accounts for the non recognition of many severe or even fatal ruptures. One way in which the oversight probably occurs is as follows It is noticed that blood is sometimes found in the pouch of Douglas without any very serious symptoms having arisen at the time it was poured out The consequence is that the tubal rupture or abortion which is supposed to be the cause of it is naturally considered to be of no real gravity—certainly not sufficiently grave ever to prove fatal—hence when serious or fatal hæmorrhage occurs from the rupture of a misplaced fœtation it is attributed to some other cause and the real cause is not so much as thought of Nothing is better calculated to correct this impression than such an article as that which has been written by Sir William Priestley in Allbutt and Playfair's "System of Gynæcology," or that by Professor Doléris[6] The latter has brought forward cases to show that effusion of blood into the free cavity of the pelvis is often due to other causes than extra uterine fœtation I myself saw not long ago an instance of hæmatocele which is worth mentioning in this connexion, for it was not only very insidious in its onset but the idea of its being due to conception could be put entirely on one side It was associated with hæmatoma of the right broad ligament and occurred in an unmarried woman, aged 35 years The whole of the cyst and adjacent uterine appendages were removed by operation and the parts were carefully examined, but no sign of pregnancy was discovered. In this case the most careful inquiry failed to fix the date of the effusion of blood or to find out any satisfactory cause for its occurrence

On the other hand, mistakes are also likely to arise from the converse belief that all, or nearly all, ruptures give rise to pelvic hæmatocele, whereas there is every reason to believe that in these early cases the accident not infrequently occurs without the production of this symptom This was certainly true of the four instances of early rupture which I have seen It will be readily understood that the absence of this indication of hæmorrhage might prove a serious stumbling block to anyone who is inclined to look upon it as an essential feature of the accident in question

But a still more important reason why these cases are not more often recognised is that their other symptoms are quite unlike those produced by the rupture of sacs of later date In fact, if in the diagnosis of these cases we make use of those rules which guide us in the diagnosis of ruptures of later date we shall, I suppose, be more likely to go astray than if we dismiss text-book rules from our minds altogether

From this it will be gathered that these very early ruptures constitute a distinct class of diseases and this is undoubtedly the case Mr Taylor, in writing on this subject, says that "early rupture of the tube from a pregnancy of from two to five or six weeks' standing is a special phenomenon of extra uterine pregnancy which has not as yet received the recognition and consideration it deserves As a disease or accident it stands quite alone"[7] But this statement must of necessity apply more particularly to those ruptures which take place before the end of the first month of pregnancy, because after that date amenorrhœa, the

[11] THE LANCET April 1st, 1899.
[1] From papers read before the Reading Pathological Society
[2] THE LANCET May 28th, 1898 p. 1447
[3] Centralblatt für Gynäkologie, No. 2, 1899 p. 50.
[4] THE LANCET March 25th 1899, p. 827
[5] THE LANCET April 1st, 1899, p. 927
[6] Bulletin et Memoire de la Société d Obstétrique et de Gynécologie 1898 p. 182.
[7] THE LANCET May 28th, 1898, p 1450.

Five days before entrance, directly after supper, she vomited and complained of headache, later in the evening she became delirious Two days after the head was held stiffly and she had much pain in the back of the neck She had fever, rapid pulse, loss of appetite, and constipation On admission she was conscious, but very irritable and difficult to examine The head was arched back and could not be brought forward The pupils were equal and reacted to light There was a marked slight internal strabismus There was nothing of moment found in the examination of the chest and abdomen She was very tender in the sub-occipital region, but there was no sign of disease of the cervical spine Lumbar puncture on April 1st was negative For the first week the condition remained about the same, the child could be roused and answered questions, the strabismus persisted, there were no changes in the optic nerves The temperature ranged from 100° to 104° F The arching of the head and neck continued, the eyes looked directly upwards (Fig 2) On the 17th a rash appeared—a diffuse erythema over the face, neck, and chest with papules The rash faded in three days The temperature ranged from 102° to 104° On April 19th a profuse purulent discharge appeared from the nose which showed the pneumococcus on cover slips, but in cultures only the staphylococcus aureus grew She could still be roused, the attitude remained as shown in the illustration There was no optic neuritis Throughout the 18th the temperature dropped from 105° to 97° on the morning of the 19th and continued about 97° until her death on the morning of the 21st One of the most remarkable features was the retention of consciousness to within a week of her death

FIG 2

Pneumococcic meningitis—cervical opisthotonos

The necropsy (No 1082) showed exudate over the sulci of the hemispheres The base, from just behind the optic commissure, over the pons and lateral lobes of the cerebellum was covered with a soft yellow exudate The posterior surface of the spinal cord showed the same The ventricles were much distended with a turbid fluid There was suppuration of the mucous membrane of the nose and of the ethmoidal and sphenoidal sinuses Cultures showed the pneumococcus in the cerebro-spinal exudate and from the nasal pus the pneumococcus and the staphylococcus aureus

(c) *Primary pneumococcic meningitis*—Future investigations will decide the proportion of cases of primary cerebro spinal meningitis due to the pneumococcus and to the diplococcus intracellularis, and it will be an exceedingly interesting study to determine whether there are clinical differences such as separate so decidedly the meningitis complicating pneumonia from the cerebro-spinal fever Judging from the bacteriological records given by Councilman Mallory, and Wright, and those of the Pathological Laboratory of the Johns Hopkins Hospital, the primary pneumococcic meningitis is rare in America—certainly much less infrequent than the secondary forms Two of Councilman's 10 cases, both infants, one aged 10 months, the other aged six days, were primary I cannot gather from N statistics how many of his cases were *primary*,[8] nor w consulting the original can one say how many of the 13 of sporadic meningitis studied by Malenchini (quot Netter) belonged to this group Of our eight cas stated, only two were primary One of these is quoting

CASE 6—A man, aged 44 years (white), was admit 6 30 P M on Sept 1st, 1897, in an unconscious state seen by his brother on Saturday, August 28th, h quite well After going to bed on the 30th, he severe chill On Monday he was too ill to go to wor the evening he became delirious and ever since ha fever, had been restless, difficult to restrain, and very On admission the temperature was 105° F and the puls 136 and small Dr McCrae saw him a few minutes af had been put to bed and took very full and careful no the condition The face was flushed and he looked distr There was no strabismus, the pupils were dilated a active The head and neck were held stiffly and the were held firmly flexed on the chest There were no of pneumonia, the heart sounds were clear The abd was not distended, there were no rose spots and the s could not be felt, there was no herpes The skin diffuse mottling, but no purpuric spots were seen was no urethral discharge The leucocytes were 13,50 cubic millimetre, no alteration in a differential of 500 The Widal reaction was not present 10 P M the temperature had reached 106° and he given a bath at 80° with ice frictions which re the rectal temperature to 103° At 11 P M the seemed to be held much more stiffly At 12 mid he was much worse and at 12 40 A died, about three days and three from the time of the initial chill necropsy (No 989) showed a diffuse lent meningitis of the hemispheres, base was much less involved and ventricles were not at all affected cord unfortunately was not exam There was a recent diffuse nephritis the urine in the bladder contained alb and tube casts There was a general mococcus infection, no pneumoni endocarditis, and the pneumococcus separated in pure culture from the m geal exudate

V—NOTE ON THE TREATMENT CEREBRO-SPINAL FEVER

In our series of cases we have use special drugs Morphia has been f given to control the pain Ice sponging been employed whenever the temper reached above 102 5° F Our mort considering that the cases were as a quite severe, has been low, only eight cases in the hospital and nine among t cases which I have seen I have al spoken of the possible benefits in ce cases of the relief of pressure by the drawal of cerebro spinal fluid In tw our cases the spinal canal has been opened, drained, irrigated Wynter[9] in tuberculous meningitis removed spinal process of the second lumbar vertebra and drained spinal canal Von Ziemssen first attempted to use therapeutics to the membranes of the cord by injecti weak solution of iodine in a case of meningitis, and Sahli practised permanent drainage through a cannula catheter So far as I know, an extensive laminectomy not been done for acute spinal meningitis until our case on Nov 6th, 1898, in which the operation was gested and performed by Dr Harvey W Cushing, the assistant in the surgical clinic of my colleague, Prof Halstead[10] The spinal canal was thoroughly irrigated salt solution and a quantity of purulent exudate washed No change followed in the existing paraplegia The bla and kidneys became infected and death occurred about months after the operation The paraplegia persisted necropsy showed that the spinal meninges were smooth

[8] Twentieth Century Practice vol xvi p 193.
[9] THE LANCET May 2nd, 1891
[10] Reported in the Boston Medical and Surgical Journal, Dec. 1898

[illegible] In Case 2 laminectomy was performed on the ... day by Dr. Cushing. The patient was very ill and the spinal symptoms were specially pronounced. ... beneath the dura mater and the membranes were ... The patient ... seemed much better. ... Dr. Keen of Philadelphia has also had an instructive case. Dr. Rolleston and Mr. Turner ... have reported ... a case ... in which the patient recovered after laminectomy and drainage. On the principle of a desperate remedy for a desperate disease the operation (which has been criticised adversely in an editorial note in the *Medical ... Journal*) seems justifiable in certain severe cases in which, as in our first case, the spinal symptoms are very marked.

TWO FURTHER INSTANCES OF EXTRA-UTERINE (ONE TUBAL AND ONE OVARIAN) GESTATION IN WHICH RUPTURE OCCURRED BEFORE THE END OF THE FIRST MONTH; OPERATIONS.[1]

BY HASTINGS GILFORD, F.R.C.S. ENG.

IN THE LANCET of Feb. ..., 1897,[2] I wrote an account of two cases of ectopic gestation in which rupture of the sac took place in the third week. Both of these were attended with such severe symptoms that life was endangered. In one it was necessary to remove the sac. In the other the patient recovered without operation. At that time I was able to find reference to only ... cases of rupture at such an early date and of some of these I could get no particulars. Since then Mr. Taylor has dealt with the subject of early rupture in his Ingleby Lectures,[3] though apparently in none of the examples he mentions did rupture take place within the first month of pregnancy. ...[4] has also described a case in which it occurred within this period, and still more recently Dr. Lendon[5] has given details of a case in which the sac ruptured before the end of the third week. In the former of these two removal of the sac was followed by recovery, but in the latter death took place from hæmorrhage. The last reference to the accident is by Dr. ... who writes that there is a specimen in the Museum of University College which "consists of the uterus and appendages of a young woman who is said to have menstruated three weeks previously. The right Fallopian tube at about one inch from its abdominal end is dilated into a small cyst half an inch in diameter forming the sac of a ruptured tubal gestation. The patient, an unmarried milliner, died from hæmorrhage within a few hours." Further search would no doubt bring to light other instances of early rupture, but their proportion must be very small when compared with those of recorded ruptures of later date. It is certain that many more cases take place than find their way into the medical journals. There is indeed reason to believe that they are by no means rare, but are of more frequent occurrence than those which happen after the first month of gestation. Moreover, their non-publication is not entirely due to their being less dangerous, for, as the above-mentioned cases will show, the symptoms to which they give rise are sometimes of the most dangerous description. In all those which I have seen the patients were in grave peril and in at least two of them would probably have died had not the source of bleeding been dealt with by operation. The only conclusion which can be arrived at is that many cases of this accident are not published for the simple reason that they are not recognised, but are diagnosed as some other morbid condition. This being the case it will be worth while to inquire into the causes of the non-recognition of such a ... and important accident or disease.

In the first place, it is probable that one of the chief ... is to be found in the ... [illegible]

On the other hand, mistakes are also likely to arise from the converse belief, that all, or nearly all, ruptures give rise to pelvic hæmatocele, whereas there is every reason to believe that in these early cases the accident not infrequently occurs without the production of this symptom. This was certainly true of the four instances of early rupture which I have seen. It will be readily understood that the absence of this indication of hæmorrhage might prove a serious stumbling-block to anyone who is inclined to look upon it as an essential feature of the accident in question.

But a still more important reason why these cases are not more often recognised is that their other symptoms are quite unlike those produced by the rupture of sacs of later date. In fact, if in the diagnosis of these cases we make use of those rules which guide us in the diagnosis of ruptures of later date we shall, I suppose, be more likely to go astray than if we dismiss text-book rules from our minds altogether.

From this it will be gathered that these very early ruptures constitute a distinct class of disease, and this is undoubtedly the case. Mr. Taylor, in writing on this subject, says that "early rupture of the tube from a pregnancy of from two to five or six weeks' standing is a special phenomenon of extra-uterine pregnancy which has not as yet received the recognition and consideration it deserves. As a disease or accident it stands quite alone." But this statement must of necessity apply more particularly to those ruptures which take place before the end of the first month of pregnancy, because after that date ... the [illegible]

1 [illegible]
2 From papers read before the ... Society.
3 THE LANCET, May ..., p. ...
4 Centralblatt für Gynäkologie, ...
5 THE LANCET, ...
6 THE LANCET, April ...

Bulletin et Mémoire de la Société d'Obstétrique et de Gynécologie ... p. ...

THE LANCET, May ..., p. ...

Five days before entrance, directly after supper, she vomited and complained of headache, later in the evening she became delirious Two days after the head was held stiffly and she had much pain in the back of the neck She had fever, rapid pulse, loss of appetite, and constipation On admission she was conscious, but very irritable and difficult to examine The head was arched back and could not be brought forward The pupils were equal and reacted to light There was a marked slight internal strabismus There was nothing of moment found in the examination of the chest and abdomen She was very tender in the sub occipital region, but there was no sign of disease of the cervical spine Lumbar puncture on April 1st was negative For the first week the condition remained about the same, the child could be roused and answered questions, the strabismus persisted, there were no changes in the optic nerves The temperature ranged from 100° to 104° F The arching of the head and neck continued, the eyes looked directly upwards (Fig 2) On the 17th a rash appeared—a diffuse erythema over the face, neck, and chest with papules The rash faded in three days The temperature ranged from 102° to 104° On April 19th a profuse purulent discharge appeared from the nose which showed the pneumococcus on cover slips, but in cultures only the staphylococcus aureus grew She could still be roused, the attitude remained as shown in the illustration There was no optic neuritis Throughout the 18th the temperature dropped from 105° to 97° on the morning of the 19th and continued about 97° until her death on the morning of the 21st One of the most remarkable features was the retention of consciousness to within a week of her death

FIG 2

Pneumococcic meningitis—cervical opisthotonos

The necropsy (No 1082) showed exudate over the sulci of the hemispheres The base, from just behind the optic commissure, over the pons and lateral lobes of the cerebellum was covered with a soft yellow exudate The posterior surface of the spinal cord showed the same The ventricles were much distended with a turbid fluid There was suppuration of the mucous membrane of the nose and of the ethmoidal and sphenoidal sinuses Cultures showed the pneumococcus in the cerebro-spinal exudate and from the nasal pus the pneumococcus and the staphylococcus aureus

(c) *Primary pneumococcic meningitis*—Future investigations will decide the proportion of cases of primary cerebro spinal meningitis due to the pneumococcus and to the diplococcus intracellularis, and it will be an exceedingly interesting study to determine whether there are clinical differences such as separate so decidedly the meningitis complicating pneumonia from the cerebro-spinal fever Judging from the bacteriological records given by Council man, Mallory, and Wright, and those of the Pathological Laboratory of the Johns Hopkins Hospital, the primary pneumococcic meningitis is rare in America—certainly much less infrequent than the secondary forms Two of Council man's 10 cases, both infants, one aged 10 months, the other aged six days, were primary I cannot gather from statistics how many of his cases were *primary*,[8] nor consulting the original can one say how many of the of sporadic meningitis studied by Malenchini (qu Netter) belonged to this group Of our eight c stated, only two were primary One of these is quoting

CASE 6—A man, aged 44 years (white), was admi 6 30 P M on Sept 1st, 1897, in an unconscious state seen by his brother on Saturday, August 29th, quite well After going to bed on the 30th, he severe chill On Monday he was too ill to go to wo the evening he became delirious and ever since h fever, had been restless, difficult to restrain, and very On admission the temperature was 105° F and the pu 136 and small Dr McCrae saw him a few minutes a had been put to bed and took very full and careful n the condition The face was flushed and he looked dist There was no strabismus, the pupils were dilated active The head and neck were held stiffly and th were held firmly flexed on the chest There were no of pneumonia, the heart sounds were clear The ab was not distended, there were no rose spots and the could not be felt, there was no herpes The skin diffuse mottling, but no purpuric spots were seen was no urethral discharge The leucocytes were 13 5 cubic millimetre, no alteration in a differential of 500 The Widal reaction was not present 10 P M the temperature had reached 106° and h given a bath at 80° with ice frictions which re the rectal temperature to 103° At 11 P M the seemed to be held much more stiffly At 12 mi he was much worse and at 12 40 A died, about three days and three from the time of the initial chill necropsy (No 989) showed a diffuse lent meningitis of the hemispheres base was much less involved an ventricles were not at all affected cord unfortunately was not exam There was a recent diffuse nephriti the urine in the bladder contained al and tube casts There was a general mococcus infection, no pneumoni endocarditis, and the pneumococcus separated in pure culture from the m geal exudate

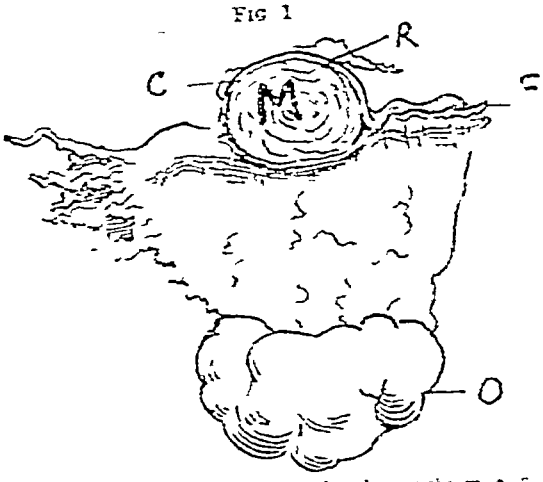
V—NOTE ON THE TREATMENT CEREBRO SPINAL FEVER

In our series of cases we have use special drugs Morphia has been f given to control the pain Ice sponging been employed whenever the temper reached above 102 5° F Our morta considering that the cases were as a quite severe, has been low only eight cases in the hospital and nine among t cases which I have seen I have al spoken of the possible benefits in ce cases of the relief of pressure by the drawal of cerebro spinal fluid In tw our cases the spinal canal has been opened, drained, irrigated Wynter[9] in tuberculous meningitis removed spinal process of the second lumbar vertebra and drained spinal canal Von Ziemssen first attempted to use l therapeutics to the membranes of the cord by injectin weak solution of iodine in a case of meningitis, and Sahli practised permanent drainage through a cannula catheter So far as I know, an extensive laminectomy not been done for acute spinal meningitis until our case on Nov 6th, 1898, in which the operation was gested and performed by Dr Harvey W Cushing, the assistant in the surgical clinic of my colleague, Profe Halstead[10] The spinal canal was thoroughly irrigated salt solution and a quantity of purulent exudate washed No change followed in the existing paraplegia The blad and kidneys became infected and death occurred about months after the operation The paraplegia persisted necropsy showed that the spinal meninges were smooth

[8] Twentieth Century Practice vol xvi p 193.
[9] THE LANCET May 2nd, 1891
[10] Reported in the Boston Medical and Surgical Journal Dec. 2 1898

a small and perfectly healed rent could be seen in the sac wall underneath It is evident that these three rupture and the various stages in the healing of previous ruptures and the suggest the view that all the severe attacks of pain were produced in the same way On cutting into the tumour this opinion is still further supported by the appearance of the contents, which consists of a clot laminated almost after the manner of an onion These laminæ are evidently due to successive bleedings, some of which were probably self-con

FIG 1



[illegible] passages of the right side of the uterus the [illegible] Ovary [illegible] pain [illegible] and open [illegible] M [illegible] in the [illegible]

to distend the sac and cause minor degrees of pain [illegible] breaking through the wall of the tube while [illegible] more severe and accounted for the presence of the [illegible] outside the sac

Another important point in this case is that though there was free haemorrhage into the general peritoneal cavity, yet there was no obvious collection of blood in the pelvis Microscopical examination of the specimen failed to show the presence of chorionic villi, but I think there can be no doubt that it was a product of conception I appearance so soon after marriage, the rounded and [illegible] nature of the swelling the characteristic uterine haemorrhage and pain, all point combining to this origin There seems no reason why the impregnated ovum should not [illegible] at any stage of its existence. It is by no means improbable that death sometimes takes place when the ovum is no more than a few days old or before the chorionic villi have been formed.

CASE 4.—This patient was a married woman aged 33 years, who had had three living children, the last of whom was born at the seventh month of gestation and died a few days after birth. She had also had one miscarriage which took place three years before her present illness Her general health was fairly good, she had suffered from dyspepsia and slight dysmenorrhœa but was quite regular The last period had ceased 14 days before her illness, it was of the usual character and duration. On the evening of the day on which the illness occurred she was getting into bed when, suddenly and without warning severe pain was felt at the upper part of the sacrum and almost simultaneously in the upper part of the abdomen under the left breast. It was so acute that she became sick and faint and was at first unable to move, but presently sank down on the bed and vomited. Dr Abram was sent for early on the following morning and when he arrived found her cold and pale and in severe pain. The pulse was small and frequent and there was much tenderness over the whole of the right side of the abdomen, with rigidity of the muscles From this time up to the performance of the operation her history was that of a case of acute intestinal obstruction. The bowels acted only once, and then but slightly, a few hours after the onset of the attack Afterwards neither fæces nor flatus were passed per anum though soap-and-water enemata were given Meanwhile the patient could retain nothing by the mouth and brought up much fæces She continued in this condition for two days when Dr Abram asked me to see her with a view to operation At this time she looked very ill, her face was haggard and anxious, her eyes were sunken, her pulse was 120 per minute, small and soft and her temperature was 101 F The abdomen was slightly distended and on the left side the muscles were so rigid that nothing could be made out by manipulation There was no dulness to indicate the presence of fluid The whole of the abdomen was very tender though the most sensitive part was in the region of the descending colon. At frequent intervals she "pumped" up mouthfuls of fæces without retching There was no doubt that peritonitis was present, but it was not easy to say what had produced it The diagnosis lay between three causes (1) rupture of the sac of an extra-uterine gestation, (2) perforated gastric ulcer, and (3) acute intestinal obstruction

1 A vaginal examination was made but except that the uterus was tilted a little backward nothing could be detected that was abnormal The uterus was not enlarged and the tubes and ovaries appeared to be healthy She complained of pain during the examination but the tenderness was not more than might have been expected considering that there was general peritonitis The breasts were not enlarged and the nipples were not discoloured Moreover though she was closely questioned on the subject she denied having had any symptoms of pregnancy It was therefore decided that her condition was not likely to be due to rupture of the sac of an extra-uterine gestation 2 In some respects her condition tallied with that which results from the perforation of a gastric ulcer It was true that she had had no symptoms of dyspepsia but, seeing that these ulcers are sometimes latent, it was felt that this fact did not altogether exclude such a cause On the other hand, the seat of pain did not correspond with that which is usual in this condition for I believe it is generally either over the stomach itself, at the lower part of the abdomen on the left side or in the shoulders. But in this case the seat of both pain and tenderness pointed distinctly to the left hypochondriac region as the origin and chief seat of the disturbance The fact that so much eructation and vomiting had occurred and that the peritonitis had not become septicæmic in character were thought to be against the view of its gastric origin 3. But while it seemed possible to exclude pregnancy and almost to exclude the perforation of an ulcer of the stomach, there were difficulties in deciding that the condition of the patient was due to intestinal obstruction The pain seemed to be definitely located in the large intestine and yet there was no history of constipation and no sign of a tumour such as might have been caused by intussusception. It was difficult to understand what could have caused acute obstruction in the splenic flexure of the colon Under these circumstances we both came to the conclusion that the case was probably one of intestinal obstruction, but that it was impossible to decide upon its nature until an anæsthetic had been given.

Ether was therefore administered on the afternoon of the third day after the onset of symptoms and arrangements were made either for the reduction of intestinal obstruction or for dealing with any other morbid condition which might be found. No help whatever being derived from the anæsthesia, the abdomen was opened above the navel and one inch to the left of the middle line. On cutting into the peritoneal cavity the escape of a quantity of dark blood at once settled the question of the nature of the case The hand was however introduced through the opening for the sake of further confirmation and the detection of a small rough body in the neighbourhood of the left ovary placed the pathology of the accident beyond a doubt. Another opening was then made below the umbilicus and a little to the left of the middle line It was estimated that more than three pints of blood were present in the peritoneal cavity Most of this was liquid, but much also existed as clot Some was found in Douglas's pouch, but by far the greater portion was in the general cavity of the peritoneum above the pelvis It was washed out with boiled water and the left broad ligament and the parts attached to it were drawn into view and examined. The irregular and half-organised clot which is shown in the illustration (Fig 2 A) was found to be attached to the upper and inner part of the ovary well away from the tube. It had evidently been extruded through the rent in the ovary and had become attached to this place at the time of rupture It broke away from its attachment while the part was being removed. Nearly the whole of the tube and the greater part of the broad ligament were taken away The right ovary and tube were examined and found to be healthy Th-

presence of a pelvic tumour, or other indications of gestation make their appearance and tend to bring these cases into line with ruptures of later date Under these circumstances it may be of some use to draw attention to the main points of distinction between early and later ruptures

Ruptures which occur before the end of the first month of gestation differ from those of later date in the following particulars, viz 1 As regards their history all the usual signs of pregnancy may be absent Menstruation may be regular Vomiting, breast pigmentation, and other indications of conception have not had time to put in an appearance 2 Local examination may reveal no evidence of the presence of a tubal or other swelling There may not be the slightest bulging or bogginess of Douglas's pouch to suggest the presence of escaped blood 3 The initial symptoms may at once divert attention from the pelvis In all four cases which I have seen the seat of pain has been in the abdomen and not in the pelvis In two pain was first felt in one iliac region In the other two it first appeared in the "small" of the back and in one of them about to be described agonising pain was felt almost simultaneously in the region of the splenic flexure of the colon 4 The later symptoms may also be abdominal and not pelvic Thus in two of these cases no local indications of hæmatocele could be detected even while the patients were under the influence of an anæsthetic, and in spite of the fact that in one of them nearly three days elapsed between the rupture and the examination In the other two the only sign of any importance was the presence of a small tumour in the broad ligament 5 It might be expected that the rapid onset of extreme anæmia would furnish a valuable clue to the nature of the case But as a matter of fact no reliance could be placed on this symptom in any of the cases I have seen It is true that anæmia was present, and severe anæmia, but there was no more pallor or restlessness or disturbance of the pulse than may be noticed in some cases of severe shock from the perforation of gastric ulcers in chlorotic patients 6 The symptoms may point positively to some other morbid condition. Thus in one of these cases there was every indication of the accident having been due to the rupture of a gastric ulcer, and though it was noticed that there was a large quantity of fluid lying free in the abdominal cavity no help to diagnosis was derived from this fact Neither Dr Abram (who pointed out this symptom) nor I could suppose that this fluid was blood, for the anæmia did not seem sufficiently severe It misled me into forming the opinion that the patient might have had a latent ovarian cyst and that her symptoms were possibly due to its twisting and rupture In Dr Benham's case, also, so much blood was poured out as to cause dulness in the flanks In the last of my cases the symptoms were so much like those of acute intestinal obstruction that the abdomen was actually opened for the purpose of dealing with that complaint

From these reasons it is evident that these very early ruptures must sometimes be extremely difficult to diagnose This difficulty will be appreciated when I say that in the last case which I have described, though both Dr Abram and I were fully alive to the possibility of the rupture of an extra uterine sac having occurred, and though we put many leading questions to the patient and made careful bimanual examinations both before and after anæsthesia, we failed to elicit any indication of pregnancy and were compelled by all the rules of evidence to dismiss from our minds the idea of the case being due to that cause At the same time it must be noted that, as a rule, there are certain straws of evidence to show in which direction our diagnosing faculties should be directed Thus, in my first case there had been slight uterine hæmorrhage which came on after the cessation of the usual "period" and my third case was correctly diagnosed before any severe hæmorrhage had taken place from two indications alone—one being irregular and painful uterine hæmorrhage and the other the presence of a small round tumour beside the left ovary Moreover, in the fourth case, in which indications of pregnancy seemed to be absent, the patient was able to tell us after she recovered that she had had discomfort in the breasts such as she had before experienced soon after conception But she was too ill to remember this slight but important symptom before the operation was commenced As the two cases I am now about to report form a regular series with those I have already published, it seems best to treat them as such The first of these two will therefore be regarded as the third of the series

CASE 3 —The patient was a woman, aged 23 years, who had been married six weeks when I first saw her Her previous medical history was uneventful except that she had suffered from dysmenorrhœa, which had sometimes been sufficiently severe to confine her to bed for a few hours Menstruation was "regular" She began to menstruate 14 days after her marriage This period was unattended by the usual pain and did not cease at the end of four days, as her periods had previously done From that time the flow continued almost incessantly but varied greatly in quantity and sometimes ceased altogether for a few hours. It was not markedly shreddy and only occasionally contained clots After a few days she began to experience occasional pains of a cutting nature in the upper part of the right side of the abdomen and was also afflicted with flatulence. She then consulted a medical man in the town where she was living and, according to her own account, was treated for "spasms" and indigestion After a short time she sought further advice and was treated for "dysmenorrhœa" Meanwhile her symptoms increased so much in severity that sometimes when attacks came on she would cry out with pain or roll about on the bed or on the floor When I saw her four weeks and two days after the onset of menstruation there were no signs of pregnancy except that on bimanual examination the uterus felt large for a nulliparous woman, though the sound showed a cavity of only two and a half inches in length The uterus moved freely, but as the fundus was dragged over to the left a sharp pain was produced similar in nature and situation to that of which she had complained before On the right of the uterus, but distinct from it and easily moved, was a swelling which seemed to consist of two parts, the lower being as large as a small walnut, while the upper was smaller and could not be clearly defined At the time I thought they were connected, but the abdomen was tender in every part and particularly about the uterus, so that I could not examine it thoroughly It was afterwards found that the lower of these swellings was the ovary and the upper the enlargement in the tube The last attack of pain had been so severe that I thought it possible the sac had already ruptured or that the ovum had aborted into the abdominal cavity This view was indicated also by the great tenderness of the abdomen, which was like that produced by the presence of blood I therefore gave the patient some opium, and after explaining the nature of the case to the friends decided to watch the course of events. From this time both pain and discharge ceased for 10 days, but I kept the patient in bed, much against her inclination The opium was not continued after the first three days After 10 days the pain began to return and while I was making arrangements for an operation she was suddenly overcome with an attack which exceeded in severity any that she had yet had. This came on suddenly and without warning while she was asleep and caused pallor, faintness, and vomiting Bimanual examination of the uterus revealed no alteration except that the abdomen was again very sensitive, as it had been before the previous attacks I now got Dr Marnott to see her and he agreed with me that the condition was undoubtedly due to the rupture of a gestation sac and that abdominal section should be undertaken without delay

On opening the abdomen a quantity of dark blood, to the amount of a pint or more, escaped through the incision The specimen, of which I give an illustration (Fig 1), was then removed from the right side of the uterus and the abdomen was washed out with boiled water The left tube and ovary were quite healthy The condition of the patient for three days after the operation gave rise to anxiety owing to persistent abdominal pain and distension, frequent eructations and vomiting, and obstinate constipation At the end of that time some sulphate of magnesium which had been given her in small and repeated doses began to act and the subsequent history of her recovery was uneventful

An examination of the specimen removed showed that the ovary was large and that in the middle of the length of the tube was a circumscribed bulging of the wall measuring 1 8 centimetres in length and 1 2 centimetres in width The wall of this sac showed no obvious rent in the fresh state, but in three places organised clots had collected where minute ruptures had taken place One of these small collections of fibrin was not readily seen and was too tough and adherent to be removed, another was capable of being displaced, and the third and largest and most recent, which was situated on the summit of the sac, was still soft and could be easily stripped off On carefully lifting up its edge

upwards at the time of the final hæmorrhage and directly after its displacement from the Graafian follicle It was attached so loosely that it broke away inadvertently while it was being handled It is evident, moreover, that the attachment could not have been of long duration inasmuch as it was attached by a part where the clot was comparatively new It will be noticed that this mole is of the shape of a Tyrolese hat, the old decolourised clot forming the body of the hat and the fresher clot the brim The older and firmer part can be fitted into the cavity of the ovary, and though it is not quite of the same shape it has every appearance of having at one time been in that situation, for the more recent part of the clot projects in a way which is shown in the figure and in so doing exactly seals up the opening It is evident from the appearance of the mole that hæmorrhage must have taken place on more than one occasion, but it could not be ascertained that the patient had experienced any previous symptom such as might have been expected from such a cause In all probability the first hæmorrhage or hæmorrhages were too slight to cause pain, and it was only the final outburst which gave rise to disturbance Such a specimen as this is of far more importance in the establishment of the possibility of ovarian pregnancy than if it had been of late conception, for under the latter circumstance, even if the seat of conception appeared to be in the ovary, the mere size of the sac would bring it into relation with adjacent parts in such a way as to leave room for doubt as to its true nature This specimen seems to prove not only that the sperm cell of the human being sometimes reaches the ovary but that it is capable of finding its way through solid tissues, such as that of the stroma of the ovary

Reading

NON-FATAL PERFORATION IN A CASE OF GASTRIC ULCER, HÆMATEMESIS, TRANSFUSION

BY C J WHITBY, M D CANTAB

I HAVE recently had under my care a case of gastric ulcer presenting some unusual features which I think deserve to be recorded. The patient, who was 37 years of age, arrived at the Clifton Spa on Jan 13th, 1899, and I was at once sent for and found him bent double with pain in the stomach. He had been treated by me here for a fortnight in July, 1898, for severe dyspepsia associated with pain in the back and had then been told of the probable existence of ulceration He had gone away somewhat better but had returned to the hydropathic establishment on Nov 25th, Dec 2nd, and Dec 15th, 1898, on each occasion remaining two or three days only On the last occasion the symptoms of ulceration were more definite—there had been slight hæmatemesis (fluid blood) which had occurred while the diet was restricted to milk and soda I then warned the patient that he ought to make up his mind to give up work for a time and submit to a proper course of treatment, but this advice he did not see his way to adopt On Friday, Jan 13th, he told me that he had been in agony with pain since Sunday and taking almost nothing The acute pain had been induced by an injudicious meal of beef and port wine. There had been several attacks of hæmatemesis, each followed by temporary relief Hot fomentations were now administered with some slight relief and as soon as the patient was in bed I gave one third of a grain of morphia subcutaneously and some what later one pint of Benger's food per rectum Three hours later one of Burroughs and Wellcome's nutrient suppositories was inserted This appeared to arrest the assimilation of the nutrient enema, for two hours later (11 0 P M) I found him suffering from severe griping pains and evident flatulent distension of the cæcum and to a less degree of the colon To relieve this a hot enema was administered, which caused an action of the bowels and a free discharge of flatus The effort of defecation induced vomiting, a large quantity of altered blood being ejected As events turned out it was extremely fortunate that the stomach was emptied in this way On the following day rectal feeding was continued and nothing of importance occurred until about 3 30 P M At that time, whilst lying peacefully in bed, the patient suddenly felt a sharp pain in the right hypochondrium, followed by abdominal rigidity, marked dyspnœa, and a peculiar sense of fixation of the right lung The pain was of a scalding character and the patient's first thought was that a hot water bag which rested on the epigastrium had sprung a leak Shortly afterwards I arrived and found him in a slight rigor, the temperature was normal, the pulse was 120, the extremities were cold, and the expression was haggard and anxious There was extreme tenderness in the neighbourhood of the pylorus, liver dulness was present, but the muscles of the right side of the abdomen were tensely resistant The temperature gradually rose to a little over 99° F That evening the patient was seen by Mr C Morton and Dr Michell Clarke The former gentleman agreed with me that probably a perforation of slight extent and possibly of a valvular character had occurred All three of us after careful consideration agreed that as no change for the worse seemed imminent and as the stomach had been empty for a good many hours the question of operation might be deferred until morning The patient passed a quiet night and the condition in the morning was practically unchanged Tenderness near the pylorus was intense and the peculiar sensation of pain and fixity of the right lung extended almost up to the clavicle Nutrient enemata were administered two or three times daily, each containing 10 minims of morphia solution and a drachm or more of liquor pancreaticus The evening temperature on this and on several succeeding days was from 99° to 99 4° and the morning temperature was subnormal On the third day (Jan 17th) the patient first complained of a cough The desire to cough was almost constant, but the attempt to do so was very painful and it was with great difficulty that the patient expectorated some greenish tenacious sputa On the next (the fourth) day I detected some rhonchi at the base of the right lung The pyloric tenderness was now gradually diminishing, but the cough increased and the expectoration became freer and more abundant The sense of pain and stiffness in the right side of the thorax also disappeared very gradually By the sixth day the symptoms of a localised peritonitis (e g , pyrexia, pain, tenderness, and increased resistance in the right hypochondrium) had almost cleared up, but the cough was very troublesome and the expectoration was free and muco purulent Griffin's nutrient suppositories were being administered in alternation with enemata of broth and Benger's food, but on the sixth day aerated milk by the mouth was tried but as it caused some pain it was discontinued The rectal enemata, however, were so badly retained that a few days later an attempt was made with peptonised milk, two teaspoonfuls being taken at intervals of about 10 minutes From the tenth to the sixteenth day rectal feeding was resumed because of a return of pain, but the enemata were badly retained and nutrition was obviously failing Then peptonised chicken jelly was tried in teaspoonful doses and being well borne, custard puddings, &c , were gradually added and the patient began to pick up strength and to recover appetite The cough by this time had disappeared as had also the gastric pain and tenderness The weight on Jan 31st was only 6 st 8½lb but on Feb 11th it had increased by 3 lb and the patient now seemed well on the road towards recovery Two days later (Feb 13th) there was a sudden return of pain It lasted all day and was succeeded during the night by vomiting of a clear liquid which in taste and colour resembled calf's foot jelly The patient had been taking calf's foot jelly for some days and, I think, more freely than he should have done. The appetite, which had been extremely good, now failed entirely There were constant nausea and a good deal of pain Rectal feeding was resumed, the pain diminished but not the nausea which was so constant and distressing that on the following day I washed out the stomach, thus removing a large quantity of clear liquid still having the smell and colour of calf's foot jelly Rectal feeding, always ill borne, was so obviously failing to keep up the nutrition that I felt it advisable to resume oral feeding at all hazards At this period there were frequent attacks of syncope, so that the patient was unable to sit up in bed or to eat without assistance, and all appetite had failed Nausea was constant and emaciation was extreme There was at about this time a slight hæmatemesis, the blood rejected having the usual coffee-ground appearance The food given by the mouth was of the

uterus did not appear to be enlarged The patient gradually rallied from the operation and slowly recovered No deciduum was passed

This case is of great interest for two reasons It is, in the first place, an instance of the rupture of a gestation sac which could hardly be a month old It is, therefore, one of those cases, referred to in the first part of this article, in which diagnosis is rendered difficult if not impossible from the absence of indications of pregnancy and of pelvic symptoms But its chief claim to notice arises from the

FIG 2 A

Uterine appendages of the left side, showing the cavity in the ovary and the ovarian mole. A, Fallopian tube B Tear C, Cavity in ovary D Mole E, Chorionic villi. F Scar of attachment of mole.

fact that it appears to be an undoubted instance of true ovarian gestation Until lately there was no question but that pregnancy sometimes takes place in the Graafian follicle or in the free cavity of the abdomen Spiegelberg,[8] for example, states that he has found details of 13 reliable cases of ovarian pregnancy But later writers are inclined to doubt the possibility of the occurrence of this variety of ectopic gestation The opinion of Mr Lawson Tait on this subject is too well known to need comment, and Mr Bland Sutton has given it his emphatic endorsement.[9] Under these circumstances I thought it best to send the specimen to one of those gynæcologists who are well known to be sceptical of its occurrence He very kindly wrote to me in reply that the specimen was not one of ectopic gestation at all, that I should find no chorionic villi, and that though it would be as well to have it "microscoped" it would prove to be nothing but a specimen of the rupture of an unusually large Graafian follicle But there seemed to me to be no question but that the specimen, which is represented in the illustration, is a product of conception, for the chorionic villi are obvious and unmistakeable I was, however, glad to have his opinion on the seat of the lesion, for his letter implied that it was without doubt ovarian To have further confirmation on this point I sent the specimen to Mr Targett, and as the result of his examination fully agreed with me that the case was one of ectopic gestation and that there was good reason for the belief that impregnation had occurred within the substance of the ovary

In the fresh state the Fallopian tube was smooth and without a vestige of scar, while the fimbriæ when floated out in water were all separate from one another and from the ovary and other parts The tube was split up for its entire length in order to find if there were any signs of inflammatory or other obstruction or any scar such as might have been produced by the escape of products of conception, but no evidence of any such traces of inflammation or of primary tubal pregnancy could be discovered There was not a sign of any contraction of the tube or adhesion of the villi The ovary and tube of the opposite side were pulled out and examined at the time of the operation and found to be perfectly normal The removed ovary is 3 8 centimetres long and 3 3 centimetres broad The rent in its substance is 2 2 centimetres long The interior of the cavity is smooth, its edges are bevelled off gradually and meet together without showing any loss of substance (Fig 2 B and C) The mole which is shown below it was 2 8 centimetres long

FIGS 2 B AND C

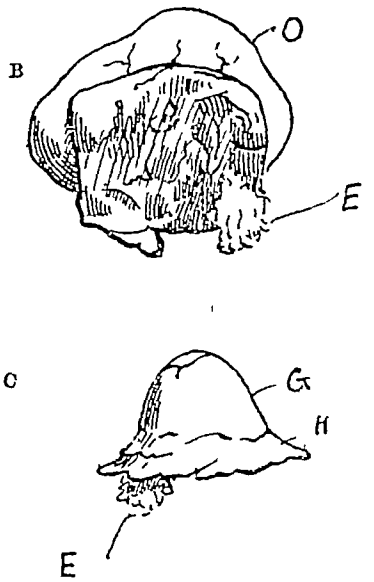


Fig B, Ovary and mole *in situ* Fig C, Side view of mole. O Ovary E, Chorionic villi G Old clot. H, More recent clot.

and 2 2 centimetres broad, and consisted for the most part of an organised clot, half of which was of recent formation while the other half was of much older date Projecting from it is a cluster of villi which both to the naked eye and under the microscope are obviously chorionic The mole was attached at the time of the operation by its posterior surface to the scar situated above and on the inner side of the ovary Half of this scar is seen at the point F (Fig 2 A), the other half was left behind in the pedicle It will be noticed that the specimen shows a tear at the junction of the ovary with the broad ligament on the inner side and that just below this rent is the rough surface made by the attachment of the mole Now, I cannot say how this rent took place for I do not think that I used sufficient violence to produce it at the time of the operation But it cannot be accounted for in any other way for when the specimen was removed it was so recent and its edges fitted so exactly together that it seemed to be evidently due to a recent tear The position of the mole above the ovary could be accounted for by the direction of the flow of blood, for it might easily have been washed

[8] Text-book of Midwifery, New Sydenham Society's Translations, p. 429.

[9] Mr Bland Sutton says that he is 'convinced that ovarian gestation has no existence.' (Surgical Diseases of the Ovaries and Fallopian Tubes p. 332) And elsewhere he has written still more decidedly

1 The temperature was mostly subnormal, and never exceeded 99° 2 The excessive collapse without signs of disease to account for it, all appeared very ill and were despondent about themselves from the first 3 The dyspnœa coming on as the vomiting lessened, and the somewhat sudden fatal termination That the cases were "algid" cases of malaria seems negatived by the fact that the place in which the patients were living was not a very malarious one and the type of fever occurring there was a very mild one, also by the absence of any fever and in all except the first of any enlargement of the spleen, and also in the only one in which an examination of the blood could be made by the absence from the blood of malarial organisms and pigment The absence of clinical and post mortem signs of kidney disease renders uræmia an insufficient explanation Many of the symptoms point to ptomaine poisoning, though the somewhat long course and the absence of diarrhœa seem against this theory The only article of food suspected was cow's heel which two of the patients had eaten just before the illness as had one other possibly, and which is a substance from its gelatinous composition offering a particularly suitable nidus for bacterial growth It was unfortunate that clinical and bacteriological examinations of the stomach contents could not be made

Cherat, Punjab India.

A CASE OF PENTASTOMA CONSTRICTUM

BY ALBERT J CHALMERS, M D VICT, F R C S ENG
ASSISTANT COLONIAL SURGEON THE GOLD COAST COLONY

By the kind permission of the Right Honourable the Secretary of State for the Colonies I am permitted to publish an account of this case of pentastoma constrictum

Early in 1898 a negro, by race a Mendi from Sierra Leone, applied for medical relief at the Colonial Hospital at Accra on the Gold Coast of West Africa He was admitted into the hospital and in the course of a few days he died At the necropsy large numbers of the parasite pentastoma constrictum were found in the lungs, liver, alimentary canal and peritoneal cavity As there are not many descriptions of this parasite and of the disease which it causes I consider that a brief account may be useful to anyone interested in tropical diseases

Pentastoma constrictum was first discovered in 1847 by Pruner[1] in Egypt in the livers of two negroes upon whom he made post-mortem examinations He apparently did not recognise the zoological position of the parasite, but sent specimens to Bilharz and Von Siebold,[2] who published an account of it, and gave it the name of "pentastoma constrictum" in their Text-book of Zoology The next recorded investigation is that given by Aitken[3] of a case under the care of Dr Kearney This observer records the clinical history of the illness and death together with the post-mortem appearances of a negro private of the West Indian Regiment who died in January, 1865, at Jamaica, but who had come from St Helena only eight months previously After this there is apparently a long interval without any further records till Girard[4] published an account of the illness and death from purulent meningitis of a Senegalese tirailleur sent to him by Dr Marchoux and Dr Clouard These gentlemen had found in the liver of the tirailleur the characteristic cysts containing the parasite, The patient died at St Louis on the West Coast of Africa, having just arrived from Kayes a town in the French Soudan or Hinterland behind the French Guinea. Such is the history of the parasite as far as I can find it Numerous references are made in many text books but the above are, I fancy, the only original observations

With regard to my own case, that of the Mendi above mentioned, the clinical history was as follows On admission into the hospital the patient was much emaciated and very weak. He had a markedly enlarged and protuberant abdomen The temperature was slightly above normal and he suffered from a hacking cough with expectoration of a little mucus He apparently suffered from pain in the abdomen and the lower part of the chest, but it was extremely difficult to be certain of his sensations as no one understood his language The physical signs which were present in the respiratory organs were those of congestion of the lungs with impaired resonance on both sides and mucoid expectoration in which no parasites were to be seen There was pain on pressure over the abdomen The bowels acted regularly but unfortunately the fæces were not examined The liver was enlarged but not tender The spleen was very much increased in size The heart was normal but the patient was anæmic When the blood was examined no parasites were to be seen or anything worthy of note The urinary system was normal, as was the cutaneous system The patient remained in much the same condition for a few days, but suddenly the temperature rose to 104° F and he became rapidly worse and died He was mainly treated for congestion of the lungs and it was this disease which was the cause of his death

The post-mortem examination was made about 17 hours after death The body was much emaciated and the abdomen was protuberant On opening the abdomen large numbers of parasites (pentastoma constrictum) were observed moving freely in the abdominal cavity over the surfaces of the various organs, to which some were also observed to be attached The liver contained in its substance and projecting on to its surface a large number of cysts each containing a clear fluid in which lay a single parasite coiled up Some of these were liberated and found to be alive, and were exactly the same as the pentastomata found free in the peritoneal cavity No parasites were found in the gall bladder or in the bile duct The substance of the liver was congested and the organ was enlarged The stomach and intestines were not congested, though they were matted together by old peritonitic adhesions Attached to the surface of the intestines at a few spots parasites were seen firmly fixed by their hooks On opening the stomach no parasites were seen, but in the small intestine, except the duodenum, there were large numbers of pentastomata None were seen in the large intestine At places in the small intestine there were signs as though the parasites were in the act of passing from the lumen of the bowel through the wall of the intestine into the peritoneal cavity The spleen was markedly enlarged and congested but entirely free from parasites The kidneys and pancreas were normal Several parasites were found attached to the peritoneal surface of the bladder, but none were found in the interior or in the wall The peritoneum everywhere showed signs of old peritonitis, but this was most marked in the region of the liver and the spleen The diaphragm, except for peritoneal adhesions, was normal, and no parasites were noticed attached to it In the chest the heart was normal, but the pericardium was much thickened The pleura was much thickened on both sides and the lungs were bound down by many old fibrous adhesions The lungs were markedly congested and œdematous and the bronchi were inflamed Both projecting on the surface and imbedded in the substance of both lungs there were numerous cysts like those found in the liver and in each of these a parasite was found No parasites were found in the muscles or among the adipose tissue of the body The brain and the spinal cord were not examined

I do not intend to describe the anatomy of pentastoma constrictum in this paper but hope to do so shortly Nothing is known at present as to the life history of this parasite or as to the means by which it enters the human body It appears to me that it enters by some means into the alimentary canal and that from this it proceeds to the liver, the cysts in which appear to be dilated biliary ducts, and into the peritoneum It also seems as though the lungs were affected through the trachea, as the cysts therein appear like dilated bronchioles The presence of the parasite in the human body sets up inflammation of the lungs and peritoneum, but it does not appear to irritate the alimentary canal or the liver The disease appears to last some time before causing the death of the patient, for as far as I could make out the above mentioned Mendi had been ill a long time The only possible means of diagnosis would be the presence of the parasite in the fæces in cases of wasting and emaciation in negroes

There is no described treatment of this disease It appears to be confined to negroes and the described cases came from

[1] Krankheiten des Orients 1847, p 245
[2] Zeitschrift für Wissenschaftliche Zoologie Band iv s. 65.
[3] Science and Practice of Medicine, 1868, vol. i. p. 650.
[4] Comptes Rendus de la Societe de Biologie 1896 vol. x. series iii. pp. 469-471.

lightest description, and though taken with reluctance caused no pain whatever On Feb 21st at 10 P M the patient suddenly woke and vomited an immense quantity of liquid blood The attendant, who had left him sleeping, found him on his return apparently at the point of death Blood covered his face and the bedclothing, and there was a large pool of blood on the carpet On my arrival he was almost pulseless, barely conscious, and deathly white I administered a large enema of very hot water and sent for Dr Michell Clarke He advised transfusion which with the aid of Mr Morton was at once begun but by means of which we hoped at the utmost to be able to keep the patient alive until morning when his friends would arrive Both median basilics were opened, and altogether something more than four pints of saline solution were introduced into the veins The immediate effects were extremely disappointing, the volume of the pulse being but little improved, and death appearing to be imminent and inevitable However, after 4 A M when Mr Morton left, the patient dozed for an hour and awoke somewhat better I remained with him all day, administering at intervals of about two hours small enemata of brandy and milk, and giving hypodermic injections of strychnine every six hours He expectorated blood and mucus and passed some blood by the rectum The patient had been reduced to extreme emaciation and anæmia before the occurrence of this great hæmorrhage and his bloodless and deathlike appearance at this time it is impossible to exaggerate At nightfall there was a further change for the worse Respiration became laboured the pulse was barely perceptible, consciousness failed, and there was rectal incontinence, the fæces having a characteristically offensive cadaverous odour The patient was delirious at intervals and was stone deaf For 24 hours he continued in this apparently moribund condition, the jaw dropped, there was Cheyne Stokes respiration, and all hope of recovery seemed out of the question But at about 7 P M of the 23rd there was a sudden change for the better Hearing and, in some degree, consciousness returned The terrible fœtor of the rectal ejecta and the prolapsed condition of the bowel still precluded any attempt at rectal feeding, but the patient sipped a little champagne and later some aerated milk He passed a good night and on the following day took small quantities of peptonised milk at intervals of from 20 to 30 minutes From this time forward his recovery proceeded without a hitch For 10 days he was fed exclusively on peptonised milk, then light farinaceous foods, fish, fowl, and at length beef and mutton were gradually added, always without ill effect The patient gained weight at the rate of from five to six pounds per week and when he left on May 15th he weighed 8 st without his clothes, which (for he is very small and lightly built) is practically his normal weight

The most interesting point in connexion with this case is the question of the occurrence or non occurrence of perforation The reasons which lead me to the conclusion that perforation took place are (1) the severity of the symptoms preceding the incident, (2) the suddenness of the onset and its characteristic nature, (3) the very definite localisation of the pain and tenderness in the neighbourhood of the pylorus and its gradual subsidence during the week following its appearance, (4) the occurrence of a localised peritonitis in the neighbourhood of the lesion, and (5) the extension of inflammatory symptoms to the base of the right lung The fact of spontaneous recovery is doubtless to be explained as due to the stomach having been empty at the time when the accident took place As regards the hæmatemesis which occurred on Feb 21st, large as was the quantity of blood which the patient vomited it did not represent the full amount of the hæmorrhage, for the stomach appeared at the time of the consultation with Dr Michell Clarke to be full of blood and a good deal of blood was subsequently passed by the rectum It may be said that the hæmorrhage would not have happened if rectal feeding had been exclusively employed, but the difficulty was that rectal feeding was so ill borne that there was obvious danger of the patient's sinking from exhaustion There can be no doubt, I think, that the transfusion saved this patient's life, as the rally on the following day was very marked, though it was followed by a second collapse in which the patient showed all the signs of impending death I think no one who had seen him as he appeared on Feb 23rd would have hesitated for a moment to say that death within a very few hours was absolutely inevitable

Clifton, Br t !

OBSCURE CASES OF PTOMAINE POISONING

BY A. R. ALDRIDGE, M B, C M EDIN, D P H,
MAJOR R.A.M.C.

I AM induced to ask you to publish short notes of these four cases in the hope that some readers may be able to offer suggestions as to their nature and cause The cases occurred in Englishmen living under practically identical conditions during the hot months in a Punjab station at intervals of a few weeks and their similarity points to a similar nature and common cause.

CASE 1 —The patient was a man, aged 30 years, a heavy drinker, who had been seven years in India and had suffered from malarial fever but not latterly On admission to hospital on March 19th he complained vaguely of feeling very ill but his symptoms were difficult to localise, pain in the loins and soreness of the throat being the chief The liver and spleen showed some enlargement, the fauces were rather congested, and the temperature was 98° F The urine contained neither sugar nor albumin and nothing abnormal could be found in the other organs On the night of the 20th pain commenced in the epigastrium and there was vomiting of bile stained matter, this continued during the next day, the vomit containing a little altered blood, but at no time was the vomiting very urgent On the evening of the 21st he became collapsed with severe pain and tympanitic distension of the epigastrium and dyspnœa, and he died during the night His temperature during the whole illness remained subnormal from 96 8° to 98° and his bowels were constipated Post mortem a considerable amount of fat was found around the heart and the left side appeared to be hypertrophied The liver was cirrhotic and adherent to the under surface of the diaphragm The transverse colon was enormously distended with gas and the stomach was moderately so and contained food mixed with "coffee ground" matter and showed several congested patches and submucous hæmorrhages along the greater curvature There was no obstruction at any part of the intestine. A dog fed on the stomach contents mixed with milk suffered no ill effects

CASE 2 —The patient was a man, aged 27 years Hi previous health had been very good He had never ha malarial fever The illness commenced on May 1st wit vomiting of bile stained, and after a few days slightly blood stained, matter Under treatment this had stopped b May 6th, but he remained very prostrate with a sense o oppression in the chest and dyspnœa His temperatu ranged from 98 to 99°F Nothing could be learned b physical examination and the urine was normal Th dyspnœa and collapse increased and he died on the seven day No post mortem examination was made

CASE 3 —The patient was a man, aged 21 years H previous health had been good The early symptoms we practically identical with those of the former case a examination gave similarly negative results The vomiti was never very urgent, but the amount of collapse was o of all proportion to it His temperature ranged betwe 97° and 98 6° F , and his bowels were constipated Dyspn came on and he died on June 19th, the seventh day of illness Post mortem adhesions of the right pleura w found and there was a large "white" clot in the ri side of the heart. On the mucous membrane of the stom were a number of hæmorrhagic spots, especially on posterior surface The spleen was small and firm, weigh 5½ ounces Blood from the spleen was examined for mala organisms and pigment, but none were found

CASE 4 —This case was almost a repetition of the for ones The illness commenced on July 6th The tempera ranged from 97 6° to 99° F The bowels were constipated there were considerable epigastric pain and cramps of muscles of the extremities The vomiting as in the for cases, lessened but he did not rally, dyspnœa with lividit the face commenced and he died on the fifth day mortem congested patches were found on the mucous m brane of the lesser curvature of the stomach and large a in the small intestine from the duodenum to the ileo c valve A large "white" clot was found in the r auricle and ventricle

Several points common to

place and the uterus and bladder remained between the thighs for a week before advice was sought They were then replaced and kept in fair position by a mechanical support. Comparative comfort was thus attained, but the strain of walking with crippled joints somewhat interfered with the usual result

On May 29th, 1898, quinine solution was injected into the broad ligament on either side of the uterus The full dose was not received as the syringe leaked The after rest was imperfect owing to a disturbance of the household by an epidemic of measles among the grand children Yet at the end of two months the patient got up with a perfectly fixed uterus For many months she walked in her struggling way without the least discomfort from prolapse and then cystocele occurred. About Christmas time the uterus prolapsed slightly and on Jan 15th, 1899 a supplementary injection of quinine was given in the broad ligament. Since that date the comfort has been perfect The patient wears a watch-spring rubber ring to support the cystocele, but the uterus remains firmly fixed with its axis in that of the inlet of the pelvis The perineal structures are absolutely lax but the uterus hangs upon its new supporting bosses which can be readily felt high up in the pelvis As the patient walks she puffs and groans till her face becomes cyanotic, but even this strain does not displace the uterus The patient was last seen on June 8th, 1899

Considering that the patient is badly fed, that she has little comfort in her home, and that she earns her scanty subsistence by attending to, and often lifting, her three grand-children the result is eminently satisfactory

Guernsey

MULTIPLE NEURITIS THROUGH NECROSIS OF THE LOWER JAW CAUSED BY AN ILL-FITTING DENTURE, EASY REMOVAL OF SEQUESTRUM, RAPID RECOVERY

BY MONTAGUE D MAKUNS, M R C S ENG, L R C P LOND

THE patient, a female, aged 25 years, had suffered from facial neuralgia on and off for years past In 1894 several decayed teeth were removed and she wore a denture which was ill fitting Subsequently a few more teeth decayed which were extracted and she wore another denture equally bad. She could not be persuaded to leave off wearing the denture and thus made herself a martyr to pain, resulting in insomnia, mental irritability, anorexia, and loss of body-weight from 11 st. in 1894 to 6½ st in October, 1898 She consulted me on Oct 10th last for motor paralysis, hyperæsthesia, wasting of the left upper limb, and swelling of the right side of the lower jaw from the external oblique ridge to the symphysis She had four fairly good lower incisors, but the two canines were much decayed by the clasps of the denture and there were four decayed molars in the upper jaw She was compelled to give up the denture From Oct. 12th to Nov 5th she received fifteen sittings of combined electric current She was put on liquid diet with digestives and hæmoglobulin cod liver oil and hypophosphite emulsion, and phosphide of zinc were administered in succession She also received anodynes and hypnotics The tenderness of the upper limb gradually disappeared, and by the middle of November she regained motion and the muscular structure showed signs of filling in. She was also relieved of neurotic symptoms from other parts of the body Simultaneously with this constitutional treatment an incision was made along the right alveolar border of the lower jaw, reaching to the osseous surface, eucaine being used as an anæsthetic, and some purulent discharge was evacuated The cavity was daily syringed with carbolic acid lotion and an antiseptic mouth wash was used. Notwithstanding the swelling rapidly increased and caused intense pain. Four leeches were applied externally, giving temporary relief, followed by purulent discharge through one of the leech bites Shortly afterwards the sequestrum could be felt by a probe loose in its cavity On Dec 1st three grains of eucaine in solution were injected along the alveolus and the discharging cavity was enlarged. The sequestrum was drawn up by the forceps and was removed from the cavity by the patient with her fingers Still the necrosis kept on creeping towards the symphysis Profiting by the experience of Sir J Tomes[1] I adopted "a less conservative line of treatment' and removed all the teeth, with the result that the purulent discharge ceased and the pain and swelling subsided The so-called hysterical symptoms disappeared and appetite and sleep were restored After a gradual decline in health and weight for five years the patient regained her weight in three months, weighing 11 st in April last It is needless to state that during her prolonged illness she had been treated for many ills that flesh is heir to and had swallowed as many patent nostrums as she could get The case is remarkable for the long suffering of the patient, the easy removal of the sequestrum, and the rapid recovery

Trehebert.

"ON THE EFFECTS OF PRIMULA OBCONICA ON THE SKIN"

BY E A BARTON, L R C P LOND, M R C S ENG

I OBSERVE that the subject of the irritation caused by handling the primula obconica is again drawing some attention and I venture to think that a case of this nature which came under my care a year or so ago may be of interest

A gardener came to see me complaining of irritation and swelling of his eyelids which were so great that he could hardly see His penis, he said, was painful and swollen and there was a troublesome rash on his hands Three months previously he had had a similar attack, though not so severe, and on questioning him closely he admitted that at that time he had much to do with primulæ, of which he had a large number in pots Nearly a week before the present attack came on the patient had moved all the primulæ from one hothouse to another, and among them were many specimens of primula obconica In the present attack the eyelids and penis swelled before the eruption on the hands appeared, though this followed a few hours afterwards The irritation and itching were almost intolerable He had a habit of rubbing his eyes when at work. On examination the lids were very œdematous, especially the lower ones, and were shining and tense The penis was enormously swollen with œdema, especially round the frenum and foreskin The hands showed an interesting condition They were hard and horny from manual work but the forefingers and thumbs more especially on the dorsal aspect were œdematous, red, and violently inflamed, the eruption extending over the radial half of the back of the hand and fading away toward the base of the little finger The eruption consisted of discrete papules and small vesicles scattered pretty thickly on a very inflamed red area which covered nearly all the dorsum of the hand fading at its edge into healthy skin at the wrist and ulnar edge of the hand On the eyelids and penis the papules were much fewer and more scattered. The patient was not much surprised when I told him the cause of his trouble as he was aware that some of the primulæ were "poisonous"

In ten days he was practically well and in the meantime he brought me some leaves and flowers to examine I removed some of the hairs from the leaves and examined them microscopically in glycerine I found that most of them ended in a fine horny point between which and the main trunk of the hair were some transverse markings or, as I imagined, planes of fission and I think it not unlikely that the eruption is caused by the penetration of this fine point into the skin where fracture takes place, the point being left in the dermis This would account for some of the irritation, but it is open to question whether the inflammation is more violent than could be accounted for by simple irritation from this cause It is conceivable that, as in the jequirity seeds, there may be some irritative ferment contained in the hair ends Another curious fact and, I think one worth notice is that occasionally there is a long period between the contact of the leaves and the eruption Dr Kirk on one occasion when experimenting *in corpore vili* passed ten days before the rash appeared, and in the above case there was, so to speak, an incubation of a week

Cheniston gardens, W

[1] A System of Dental Surgery p. 70.

the island of St Helena the city of Kayes on the River Senegal in the French Soudan of West Africa, and this Mendi came from the English colony of Sierra Leone Pruner does not state where the two negroes who died in Egypt came from

In conclusion I wish to thank Mr Henderson, the chief medical officer of the Gold Coast Colony, for his kindness in allowing me to record this case

Cape Coast

A CASE OF BILHARZIA OF THE VAGINA

BY FRANK COLE MADDEN, M B, B S MELB, F R C S ENG,

PROFESSOR OF SURGERY EGYPTIAN GOVERNMENT MEDICAL SCHOOL SENIOR SURGEON KASR EL AINI HOSPITAL, CAIRO

IN spite of the extraordinary prevalence of bilharzia along the course of the urinary tract, and to a less extent in the rectum, among the lower classes of the native population in Egypt, it is rare to find a case in which the primary infection is in the vagina Further, notwithstanding its very susceptible surroundings very few instances of secondary vaginal infection by extension have been noted Various explanations have been offered to account for the comparative infrequency of severe bilharzia in the female sex, the most reasonable, perhaps, ascribing it to the different habits of life in the two sexes "and in no way do they differ more than in the frequency and manner in which they bathe River bathing is but seldom indulged in by women, but in countries in which bilharzia is prevalent the men spend a no inconsiderable portion of their day in the water" (Guillemard) This statement, however does not apply in its entirety to Egypt where bathing is not at all popular At the same time the 'fellah'—agricultural labourer and the like—does a great deal of paddling in water and moist earth during the day's work If the theory of infection through the skin is to be accepted this possible water borne inoculation must be considered It is certain, on the other hand, that many cases of cystitis in the female and (to a less degree) of vesico-vaginal fistulæ are due to bilharzia, which does not appear to take on the same papillomatous growth so characteristic of the disease in the genito urinary tract of the male sex

The present case was that of a young Egyptian woman who was sent to me by Dr Aly Heidar with a view to operation for a tumour of the vagina She was quite well until about a year ago when she noticed a small pendulous tag in the vagina She had a little pain over the pubes for a few days at this time The tag gradually increased in size, fresh pieces appeared and rapidly grew until the vagina was almost completely blocked There had never been any trouble with the urine but a large piece in the front of the vagina sometimes caused pain during micturition There were never any rectal, uterine, or bladder symptoms She had been married for four years and had never been pregnant Menstruation had always been regular and was not painful On examination the mucous membrane of the vagina was much prolapsed all round owing to an extreme laxity of the vaginal walls A considerable mass of much hypertrophied mucous membrane could be extruded and the cervix uteri, quite smooth and healthy, could be felt deep down in the midst of this redundant mass of irregularly papillomatous tissue The uterus was small and freely movable The opening of the urethra was hidden by a soft warty mass, but the urethra itself was quite normal Further examination under an anæsthetic showed that the entire mucous membrane was greatly thickened and hypertrophied owing to a general papillomatous change and almost filled a more than usually capacious vagina There was a large pedunculated tuft on the anterior wall just behind the orifice of the urethra, and in the rest of the extent of the mucous membrane there were innumerable flat-topped elevations of various sizes intersected in all directions by depressions the depths of which represented the surface of the true mucous membrane Here and there a more definitely papillomatous formation was present Looking on the case as a general papillomatous change (*l* cause) in the vaginal mucous membrane the greater part of the obstructing anterior mass was removed, a catheter being placed in the bladder to prevent injury to the urethra or bladder during the operation The edges of the wound were then accurately sutured with fine silkworm gut, and when the operation was complete the outlet of the vagina was very much clearer than before

The specimen which was examined microscopically by Dr Symmers presented all the appearances of a bilharzia papilloma and numerous ova were found in the submucous tissue throughout the sections After this unexpected diagnosis the bladder was carefully examined with the sound —the cystoscope has not yet reached Egypt—but beyond a slight roughness posteriorly nothing abnormal was made out The urine was microscopically examined on several occasions but no bilharzia ova were discovered The urethra was quite healthy and the rectum was normal The condition was, therefore, not due to extension from neighbouring viscera and it was thought possible that it was a case of infection from the husband His statements, however did not support this idea He was a soldier, apparently in perfect health, and had never had any symptoms of bilharzia of the urinary tract or of the rectum He passed a small stone by the urethra when he was nine years of age All stones in Egypt are suspicious of bilharzia but other symptoms would certainly have appeared had it been due to this cause in this instance Further, he stated that at the time of his marriage he noticed that his wife had a small tag in the posterior part of the vagina and this had gradually increased in size A year or more ago he first noticed the tuft on the anterior wall Thus, though there are slight discrepancies in the two histories the possibility of infection from the husband can hardly be allowed

It would appear that this is a case of primary infection of the vagina, the pathology of which is practically identical with that so frequently described in the bladder Thus Leuckart writes "One may find on the mucous membrane of the bladder single or sometimes grouped excrescences not unlike condylomata with or without pedicles, which may present manifold variations of shape and may be as large as a bean On section the mucous membrane is thickened and the submucous connective tissue hypertrophied Both are pervaded by a rich network of capillaries, the vessels being sometimes much dilated and here and there changed to rather large cavities which often contain full grown specimens of the distoma In the parenchyma of the excrescences, which is formed chiefly of the submucous tissue, numerous eggs are found," &c A few weeks before the case described above was admitted to the hospital my colleague, Mr Frank Milton, removed a piece of a somewhat colloid papillomatous mass from the anterior wall of the vagina close to the cervix uteri, which presented in less degree many of the appearances above detailed Unfortunately, no microscopical examination was made The available literature on the subject here is of rather ancient date, but the case is worthy of record as an unusual form of bilharzic infection, the strict localisation of which to the vagina is rather difficult to understand with so many more usual centres of primary infection in such close proximity

Cairo

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

A CASE OF PROCIDENT UTERUS TREATED BY QUININE INJECTION

BY J AITKEN, M D GLASG

A SHORT, thick set woman, aged 61 years, crippled by chronic deforming rheumatism of the knees and feet, had for many years suffered from prolapse of the uterus She had borne two children and the perineum was deeply rent at the birth of the second child—now an adult Her husband was a seafaring man and for many years had been in an asylum The bringing up of the children had been accomplished by laborious work as a charwoman on the part of the mother Seven years since complete procidentia took

place and the uterus and bladder remained between the thighs for a week before advice was sought They were then replaced and kept in fair position by a mechanical support Comparative comfort was thus attained, but the strain of walking with crippled joints somewhat interfered with the usual result

On May 29th, 1898 quinine solution was injected into the broad ligament on either side of the uterus The full dose was not received as the syringe leaked The after rest was imperfect owing to a disturbance of the household by an epidemic of measles among the grand children Yet at the end of two months the patient got up with a perfectly fixed uterus For many months she walked in her struggling way without the least discomfort from prolapse and then cystocele occurred About Christmas time the uterus prolapsed slightly and on Jan 15th, 1899, a supplementary injection of quinine was given in the broad ligament Since that date the comfort has been perfect The patient wears a watch-spring rubber ring to support the cystocele, but the uterus remains firmly fixed with its axis in that of the inlet of the pelvis The perineal structures are absolutely lax but the uterus hangs upon its new supporting bosses which can be readily felt high up in the pelvis As the patient walks she puffs and groans till her face becomes cyanotic, but even this strain does not displace the uterus The patient was last seen on June 8th, 1899

Considering that the patient is badly fed, that she has little comfort in her home, and that she earns her scanty subsistence by attending to, and often lifting, her three grand children the result is eminently satisfactory

Guernsey

MULTIPLE NEURITIS THROUGH NECROSIS OF THE LOWER JAW CAUSED BY AN ILL-FITTING DENTURE, EASY REMOVAL OF SEQUESTRUM, RAPID RECOVERY

By MONTAGUE D MAKUNI, M R C S ENG, L R C P LOND

THE patient, a female, aged 25 years, had suffered from facial neuralgia on and off for years past In 1894 several decayed teeth were removed and she wore a denture which was ill fitting Subsequently a few more teeth decayed which were extracted and she wore another denture equally bad She could not be persuaded to leave off wearing the denture and thus made herself a martyr to pain, resulting in insomnia, mental irritability, anorexia, and loss of body-weight from 11 st in 1894 to 6½ st in October, 1898 She consulted me on Oct 10th last for motor paralysis, hyperæsthesia, wasting of the left upper limb, and swelling of the right side of the lower jaw from the external oblique ridge to the symphysis She had four fairly good lower incisors, but the two canines were much decayed by the clasps of the denture and there were four decayed molars in the upper jaw She was compelled to give up the denture From Oct 12th to Nov 5th she received fifteen sittings of combined electric current She was put on liquid diet with digestives and hæmoglobulin cod liver oil and hypophosphite emulsion, and phosphide of zinc were administered in succession She also received anodynes and hypnotics The tenderness of the upper limb gradually disappeared, and by the middle of November she regained motion and the muscular structure showed signs of filling in She was also relieved of neurotic symptoms from other parts of the body Simultaneously with this constitutional treatment an incision was made along the right alveolar border of the lower jaw, reaching to the osseous surface, eucaine being used as an anæsthetic, and some purulent discharge was evacuated The cavity was daily syringed with carbolic acid lotion and an antiseptic mouth wash was used. Notwithstanding the swelling rapidly increased and caused intense pain Four leeches were applied externally, giving temporary relief, followed by purulent discharge through one of the leech bites Shortly afterwards the sequestrum could be felt by a probe loose in its cavity On Dec 1st three grains of eucaine in solution were injected along the alveolus and the discharging cavity was enlarged. The sequestrum was drawn up by the forceps and was removed from the cavity by the patient with her fingers Still the necrosis kept on creeping towards the symphysis Profiting by the experience of Sir J Tomes[1] I adopted "a less conservative line of treatment" and removed all the teeth, with the result that the purulent discharge ceased and the pain and swelling subsided The so-called hysterical symptoms disappeared and appetite and sleep were restored After a gradual decline in health and weight for five years the patient regained her weight in three months, weighing 11 st in April last It is needless to state that during her prolonged illness she had been treated for many ills that flesh is heir to and had swallowed as many patent nostrums as she could get The case is remarkable for the long suffering of the patient, the easy removal of the sequestrum, and the rapid recovery

Treherbert.

"ON THE EFFECTS OF PRIMULA OBCONICA ON THE SKIN"

By E A BARTON, L R C P LOND, M R C S ENG

I OBSERVE that the subject of the irritation caused by handling the primula obconica is again drawing some attention and I venture to think that a case of this nature which came under my care a year or so ago may be of interest

A gardener came to see me complaining of irritation and swelling of his eyelids which were so great that he could hardly see His penis, he said, was painful and swollen and there was a troublesome rash on his hands Three months previously he had had a similar attack, though not so severe, and on questioning him closely he admitted that at that time he had much to do with primulæ, of which he had a large number in pots Nearly a week before the present attack came on the patient had moved all the primulæ from one hothouse to another, and among them were many specimens of primula obconica In the present attack the eyelids and penis swelled before the eruption on the hands appeared, though this followed a few hours afterwards The irritation and itching were almost intolerable He had a habit of rubbing his eyes when at work. On examination the lids were very œdematous, especially the lower ones, and were shining and tense The penis was enormously swollen with œdema, especially round the frenum and foreskin The hands showed an interesting condition They were hard and horny from manual work but the forefingers and thumbs more especially on the dorsal aspect were œdematous, red, and violently inflamed, the eruption extending over the radial half of the back of the hand and fading away toward the base of the little finger The eruption consisted of discrete papules and small vesicles scattered pretty thickly on a very inflamed red area which covered nearly all the dorsum of the hand, fading at its edge into healthy skin at the wrist and ulnar edge of the hand On the eyelids and penis the papules were much fewer and more scattered. The patient was not much surprised when I told him the cause of his trouble as he was aware that some of the primulæ were "poisonous"

In ten days he was practically well and in the meantime he brought me some leaves and flowers to examine I removed some of the hairs from the leaves and examined them microscopically in glycerine I found that most of them ended in a fine horny point between which and the main trunk of the hair were some transverse markings or, as I imagined, planes of fission, and I think it not unlikely that the eruption is caused by the penetration of this fine point into the skin where fracture takes place, the point being left in the dermis This would account for some of the irritation, but it is open to question whether the inflammation is more violent than could be accounted for by simple irritation from this cause It is conceivable that, as in the jequirity seeds, there may be some irritative ferment contained in the hair ends Another curious fact and, I think one worth notice is that occasionally there is a long period between the contact of the leaves and the eruption Dr Kirk on one occasion when experimenting *in corpore vili* passed ten days before the rash appeared and in the above case there was, so to speak, an incubation of a week

Chelsea-gardens, W

[1] A System of Dental Surgery p. 440.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus Morb*, lib iv Proœmium.

WESTMINSTER HOSPITAL

TWO CASES OF ERYSIPELAS TREATED WITH ANTI STREPTOCOCCIC SERUM

(Under the care of Dr W MURRELL)

IN many suppurative conditions the anti streptococcic serum is of value The serum is chiefly deserving of injection in cases in which septic absorption has occurred, and in which the presence of the streptococcus has been demonstrated At various times much doubt has been felt as to the connexion of erysipelas with the ordinary streptococcus, but the fact that the anti streptococcic serum has proved useful in cases of erysipelas is a powerful argument in favour of erysipelas being due to the ordinary streptococcus The anti streptococcic serum is hardly advisable in every case of erysipelas, for the majority of cases have only a short course and early and complete recovery is almost invariable. The serum is likely to prove of most benefit in severe cases of erysipelas of the face, in which the prognosis is far graver than in ordinary cases The success of the treatment in Case 1 is especially striking For the notes of the cases we are indebted to Mr Frank F Bond, house physician

CASE 1—A woman, aged 27 years, was admitted into Westminster Hospital at 4 P M on May 19th, 1899 The patient had first noticed a tender swelling on the mucous membrane of the right nostril on the 17th A few hours afterwards the outer surface of the nostril was red and swollen and by the next morning the rash had extended to both cheeks There was no history of an abrasion on the skin or mucous membrane On admission a red brawny swelling was found involving the whole face and extending upwards over the forehead as far as the roots of the hair Both ears were affected and the rash extended downwards into the neck as far as the level of the hyoid bone The eyelids were considerably swollen and partially closed The patient was quite unconscious The temperature on admission was 103° F Immediately after admission 10 cubic centimetres of anti streptococcic serum were injected into the subcutaneous tissue of the abdominal wall The face was dusted with a powder consisting of one part of zinc oxide to two parts of powdered starch and was protected from the air by a lint mask Half an ounce of brandy was administered every three hours During the night the temperature ranged between 101° and 103° The patient was delirious and did not completely regain consciousness until 5 o'clock on the following morning At 8 A M on the 20th the temperature had fallen to 101°, but during the day it rose again, and at 4 P M. it stood at 104 4° At 9 30 P M a second injection of anti streptococcic serum (10 cubic centimetres) was administered The face was still considerably swollen and the eyes were almost closed The eyelids were bathed with a weak solution of boric acid On the 21st the temperature fell to 99 8° and did not at any time subsequently reach 100° The face was not so much swollen and the eyes were fully open Two more injections of anti streptococcic serum were administered, one on the 21st and one on the 22nd The temperature fell to normal on the morning of the 22nd and remained at that point On the 24th the rash had almost entirely disappeared and the face was desquamating in large flakes The patient was well enough to get up on the 25th

CASE 2—A girl, aged 16 years, was admitted into Westminster Hospital at 5 P M on May 20th, 1899 The patient had first noticed a red tender spot immediately below the right ala nasi on the morning of the 20th She stated that she had observed no abrasion there previously The swelling rapidly spread to both sides of the face On admission there was a red brawny swelling involving the nose, the upper lip, and both cheeks extending on both sides as far as the prominence of the malar bones The margins were well defined The nose and the upper lip were much swollen and there were a few small vesicles on the alæ of the nose The temperature was 100° F The patient was treated in precisely the same way as was the patient in Case 1 The first injection of anti streptococcic serum was administered at 9 30 P M, the temperature then standing at 102 2° On the morning of the 21st the temperature had fallen to 98 At noon a second injection of 10 cubic centimetres of the serum was given The temperature at midnight rose to 99 2°, but fell next morning to normal and did not subsequently rise above 99° A third injection was administered on the 22nd On the 24th the nose was still a little swollen, but otherwise the rash had practically disappeared Slight desquamation was taking place along the edges of the alæ nasi, the rest of the skin was normal She was able to leave her bed on the 25th

Remarks by Mr BOND—Considerable attention having recently been devoted to the treatment of various forms of streptococcus infection by the injection of anti streptococcic serum I have thought that the above cases may be of interest as evidence of the value of this method of treatment in facial erysipelas The serum is extensively used in the wards of Westminster Hospital and the most successful results have been obtained in cases of erysipelas On referring to the above cases the following points are noticeable. 1 The rapidity with which an improvement in the patient's general condition is obtained In Case 1, although the patient was suffering severely from septic poisoning, as evidenced by pyrexia and delirium, within a few hours the temperature was reduced and she was perfectly rational and in three days the temperature had fallen to normal 2 The fact that the disease may be checked in the early stages by the use of the anti streptococcic serum Case 2 came under treatment within 12 hours of the commencement of the illness There was a marked improvement a few hours after the first injection of the serum and within 36 hours the temperature fell to normal 3 No local symptoms were caused by the injection except a slight tenderness at the point of inoculation which passed off without treatment in the course of a few hours The injections were administered alternately on the two sides of the abdomen below the umbilicus, this being a site which is but little exposed to pressure I am indebted to Dr Murrell for permission to publish the cases

BIRMINGHAM GENERAL HOSPITAL

A CASE OF HYDATID CYST OF THE LUNG TREATED BY INCISION AND DRAINAGE, RECOVERY

(Under the care of Dr R M SIMON and Mr LEONARD GAMGEE)

IN the Mirror of Hospital Practice on Oct 15th, 1898, we published the notes of a case of hydatid of the lung in many ways very similar to the following case The surgical treatment by incision has a very high rate of success, for according to Tuffier's statistics more than 90 per cent of the cases (55 out of 61) recover [1]Aspiration has frequently proved fatal and is now practically inadmissible Bond's method of treating hydatids by incision and removal of the cyst without subsequent drainage is not so well suited for the lung as for intra abdominal hydatid tumours

A young woman, aged 21 years, was admitted into the Birmingham General Hospital on Nov 4th, 1898, under the care of Dr R M Simon The patient complained of cough, shortness of breath, and pain in the right side of the chest. She gave the following history In February, 1897, while out walking on a very cold morning, she was suddenly seized with acute pain in the right side of the chest over the region of the breast The pain became less severe, but did not completely disappear for a period of nine weeks After this the pain recurred, though not severely, every few weeks In February, 1898, she had another attack of pain in the same region lasting for 12 weeks From this time the patient remained apparently quite well until a week before her admission into the hospital The present attack began with pain in the right side of the chest shivering, and sweating

[1] Chirurgie du Poumon.

On admission the temperature was 99° F, the pulse-rate was 96, and the respiration rate was 18 per minute The patient was troubled with a short, dry cough The right side of the chest moved less freely than the left and over an area on the front of the right chest extending from the clavicle to the upper border of the fifth rib the percussion note was dull, bronchial breathing was present and vocal resonance and fremitus were diminished Posteriorly the same physical signs were present over an area extending from the apex of the lung to the spine of the scapula Laterally the dulness extended from the mid line of the sternum on the one hand to the mid axillary line on the other hand On Nov 7th an exploring needle was passed through the second intercostal space anteriorly and some clear watery fluid containing chlorides but no albumin and no hooklets was drawn off An operation was performed by Mr Leonard Gamgee on the 9th An incision was made in the second right interspace anteriorly The layers of the pleura were adherent and bulged markedly outwards and on being incised were found to be thickened and to have lying on their inner aspect the typical membrana propria of a hydatid cyst Two pints of clear, watery fluid were let out and a large drainage-tube was inserted No daughter cysts could be felt on the finger being passed into the cavity During the subsequent progress of the case the discharge was profuse and purulent Between Nov 24th and Dec 3rd the whole of the membrana propria came away The cavity gradually contracted and the patient was discharged from the hospital quite well at the end of March, 1899 At that time the wound was quite sound and air entered freely all over the right lung, but the respiratory movements of the right chest were still somewhat restricted

Remarks by Mr GAMGEE.—Hydatid cysts of the lung in this country are uncommon, notwithstanding that next to the liver the lung is more often the seat of hydatid cyst than any organ in the body A hydatid cyst of the lung may be treated surgically in two ways—viz, (1) by aspiration, or (2) by free incision and drainage Treatment by aspiration is dangerous for while the fluid is being drawn off the wall of the cyst is apt to give way and a volume of fluid rushes into the air tubes There are many cases on record in which this has taken place with the not infrequent result that the patient has died on the table Treatment by free incision and drainage is not attended by this danger and so is always to be preferred. If the layers of the pleura are found to be non adherent it is necessary to stitch them together before opening the cyst to prevent extravasation of the fluid into the pleural cavity Whether the layers are adherent or not cannot be ascertained with certainty before operation but adhesions may be suspected when the patient has suffered any considerable amount of pain over the region of the cyst Hydatid cysts of the lung are generally single and situated in the lower part of the right lung In the surgical treatment of the condition it is manifest that the prognosis depends mainly on three factors (1) whether there is one or more than one cyst present, (2) whether the layers of the pleura are adherent or not, and (3) whether the cyst is superficially or deeply seated I am indebted to Dr Simon for permission to use the notes taken while the patient was in the medical ward.

Medical Societies.

BRITISH ORTHOPÆDIC SOCIETY—A meeting of this society was held in the Royal Infirmary Derby, on May 27th, Mr Gentles being in the chair—Mr William Thomas showed a patient in whom the Left Popliteal Nerve had been injured by a kick from a horse and Talipes Equino-Varus occurred Neurorrhaphy having failed he performed tarsectomy The result appeared to be excellent—Mr Tubby said that it was difficult or impossible to bring the ends of a divided nerve together when the division occurred close to where the trunk broke up into branches—Remarks were made by Mr Robert Jones, Mr Bennett Mr Muirhead Little, and Mr Freer—Mr Carwardine read a paper on a case of Talipes Equino-Varus treated by Phelps's Latest Operation The chief points in the operation were (1) thorough disinfection of the skin, (2) constant irrigation of the wound with an antiseptic, (3) a short incision on the inner side of the skin, (4) division of all the parts in order of their resistance, (5) when necessary linear osteotomy of the neck of the astragalus, and (6) resection of a wedge of bone from the os calcis He said that the special feature of the complete operation is the alteration of the bony axis of the foot without diminution of its length, the inner border of the foot being lengthened—Mr Tubby read notes of a case of Spastic Hemiplegia with Flexion of the Elbow and Wrist and Pronation treated by open section of the flexor tendons, especially the flexor carpi radialis, and detachment of the pronator radii teres from its insertion A hole was made in the inter osseous membrane and the tendon was passed round the back of the radius to its outer border and fixed, thus reversing the action of the muscle The patient after six weeks could pick up a pin. The wrist was kept during this time midway between flexion and extension by splints—Mr Keetley opened a discussion on Coxa Vara He described types of the two chief varieties which commence in adolescence The deformity was rachitic in origin The partial or even total absence of rachitic changes in other parts were no disproof of this, as the older the patient the more localised did rachitic changes tend to be The various modes of osteotomy which had been carried out or proposed, including a new method, were described In theory the neck of the bone should be operated on, in practice the trochanteric region was more convenient Decreased angle of the neck and shaft formed the striking feature on a first glance at the deformity, but the main changes were in the neck itself, especially near the head In fact, coxa vara was a rachitic deformity of the upper epiphyseal region of the femur The deforming influence sometimes extended far down the shaft Compensatory genu valgum was common Mr Keetley called attention to a peculiar expansion of the facial bones, giving prominence to the eyeballs and width and flatness to the upper half of the face Coxa vara in cases of early rickets was very common, but cases during adolescence were rare The commencement of the flood of modern literature on the subject dated from Mr Keetley's own paper in the *Illustrated Medical News* of Sept 29th 1888 The hip-joint was healthy in these cases For this and for other obvious reasons excision was not justifiable—Mr Muirhead Little found great difficulty in accepting the theory that late rickets was the cause In none of the extremely rickety skeletons in the London museums was anything approaching the deformities depicted by Kocher and others found It seemed to be a process *sui generis* Charpentie had shown that ostitis might cause the deformity—Mr R Jones and Mr Tubby also took part in the discussion

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN—The following is a list of the newly elected office bearers of this society—President Mr Storer Bennett Vice Presidents Resident, Mr C West, Mr W A Maggs, and Mr Arthur S Underwood, Non resident, Mr W A Hunt (Yeovil), Mr J Henry Whatford (Eastbourne), and Mr G Brunton (Leeds) Treasurer Mr W H Woodruff Librarian Mr H. Baldwin, Curator Mr Storer Bennett Editor of Transactions Mr J F Colyer Honorary Secretaries Mr J H Mummery (Foreign), Mr H. Lloyd Williams (Council), and Mr C F. Rilot (Society) Councillors Resident, Mr J H Badcock, Mr G W Bateman, Mr Leonard Matheson, Mr E. Lloyd-Williams, Mr W J England Mr J O Butcher, Mr Arthur Hopewell Smith, Mr J H Reinhardt, and Mr H G Read; Non resident, Mr A A. Matthews (Bradford) Mr Morgan Hughes (Croydon) Mr J A Fothergill (Darlington), Mr. Walter Harrison (Brighton), Mr Alexander Kirby (Bedford), Mr Martin Henry (Folkestone), Mr W H. Breward Neale (Birmingham) Mr D Corbett, Jun (Dublin), and Mr Rees Price (Glasgow)

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND—The following is the list of officers of the society elected to serve for the session 1899-1900—President Dr H Radcliffe Crocker Vice Presidents Dr Robert L Bowles, Dr A J Harrison, Mr Hutchinson, Dr J F Payne Mr Buxton Shillitoe, Dr. Walter G Smith, and Dr J H Sowers Treasurer Mr George Pernet Hon Secretaries Mr William T Freeman and Dr C H Thompson Council Dr P S Abraham, Dr F H Barendt Dr Wallace Beatty, Dr John Cavafy, Dr A. Eddowes, Dr T Colcott Fox, Mr Hope Grant, Mr Evan H Hare, Dr E. C Perry Dr H H. Phillips Conn, Dr Henry Waldo and Mr Campbell Williams.

Reviews and Notices of Books.

A Text book of Practical Obstetrics By EGBERT H GRANDIN, M D, and GEORGE W JARMAN, M D Second edition Illustrated with 64 full page Photographic Plates and 86 Illustrations in the text Philadelphia The F A Davis Co 1898 Pp 460 8vo

THIS book aims at providing the student and practitioner with the most important facts of obstetric practice Where any difference of opinion still exists as to the facts the authors have endeavoured to select those which at the present time commend themselves to the majority of obstetric teachers All anatomical, pathological, and embryological details except such as are entirely essential have been omitted The book is divided into two parts—the first treats of Pregnancy, Labour, and the Puerperium, and the second of Obstetric Surgery This arrangement is not without its drawbacks If, for example, a student wishes to know the views of the authors as to the treatment of a case of placenta prævia he will naturally turn first to the index Here he will be disappointed to find no reference to the treatment at all On turning to the reference given under placenta prævia he will find a short and sketchy account of this complication of labour and a further reference to the second half of the book for the details of the treatment recommended In the chapter upon the Induction of Premature Labour cases of placenta prævia are cited as an indication for its adoption and some pages further on the method of manual dilatation of the cervix recommended by the authors in these cases is described If, however, the student wishes to know whether after dilatation of the cervix he had better employ forceps or version he will, we are afraid, be left looking We have entirely failed to find any mention of placenta prævia in the chapter upon the forceps, and yet cases of placenta prævia occur from time to time in which the forceps are a suitable and proper means of delivery We are told in the preface that the busy practitioner, when in want of information, wishes to secure it without the loss of time entailed in searching through a mass of theory and statistics This is a statement upon which we are in entire agreement with the authors It becomes a question, however, whether the practitioner would not prefer to skip the theory and statistics if he could find all he wanted to know about a certain subject in one chapter rather than to search in several different places in a book with a very poor index for what is, even when he has united the several paragraphs, a somewhat incomplete account of a very important condition The book, however, contains some good and clear descriptions of various obstetric operations, even if it does not fulfil the purpose with which it is written Some of the recommendations are necessarily not such as would be approved of by all obstetricians We hardly think that many would follow the practice of opening the abdomen to dilate the contraction ring in cases of inversion of the uterus in view of the various methods available by the vagina for treating difficult cases of this kind The application of forceps above the brim is regarded with disfavour by the authors and yet at the present time we are witnessing a revival of their use under such conditions in preference to version, especially in cases where the practitioner is accustomed to use axis traction forceps They approve of Dührssen's method of incising the cervix and also of episiotomy In the treatment of occipito-posterior presentations they recommend introduction of the whole hand into the uterus and rotation of the child s body The statement that in cephalotripsy the cranium is crushed in the diameter opposite to that in which the crushing force is exerted has been shown to be inaccurate by Milne Murray and others In view of the fact that the cephalotribe has been frequently used in the higher grades of pelvic contraction with good results we cannot agree with the statement that it is applicable only in the presence of the minor grades of pelvic contraction We do not gather how the authors would deliver cases of marked pelvic contraction where abdominal section is inadmissible Some of the illustrations are fair but others are very poor The book upon the whole is not one which we can recommend, although it would appear to have met with a favourable reception in its own country

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Beiträge zur Augenheilkunde In Gemeinschaft mit Professor Dr E FUCHS in Wien, Professor Dr O HAAB in Zürich Professor Dr A VOSSIUS in Giessen, herausgegeben von Professor Dr R DEUTSCHMANN in Hamburg (*Essays on Ophthalmology* Under the Editorship of Professor FUCHS, Professor HAAB, Professor VOSSIUS, and Professor DEUTSCHMANN) Parts xxxi -xl Hamburg and Leipsic Leopold Voss 1898

THESE essays, which are issued at irregular intervals in pamphlet form and run to about 100 pages each at the cost of 2*s* 6*d* or a little more, are very instructive Good writers have been selected and the subjects, which are very diverse, are well and fully treated The following is a list of the last 10 parts with the names of the authors Luxatio Bulbi, by Dr Karl Rothenpieler of Laibach, The Sequelæ of the Treatment of Glaucoma as Observed in 76 Private Patients under the care of Dr Haab, arranged by Dr Haab's assistant, Dr Sidler Huguenin of Zürich, Retinal Hæmorrhages in Blood and Vascular Diseases, by Dr E Ammann of Winterthur, on Horny Degeneration of the Conjunctival Epithelium (Tyloma Conjunctivæ), by Dr Best of Giessen, Essays on the Normal and Pathological Histology of the Lacrymal Passages, by Dr K Joerss of Giessen, essays on the Treatment of Trachomatous Diseases of the Cornea and especially of Ulcers, by Dr L Blumenthal of Riga, on the Causes leading to Congenital Defects of the Lids, by Dr Friedrich Geissmar, on Amyloid Degeneration of the Conjunctiva, by Dr Hübner of Cassel, on the Etiology and Treatment of Dacryocystoblennorrhœa, by Dr N Cahn of Riga, and lastly, an essay entitled, "Further Communications upon my Method of Treatment in cases of Detachment of the Retina and a report on 101 cases of this lesion operated on by my Method," by Professor R Deutschmann of Hamburg

It will be seen that the essays embrace a great variety of subjects and that they constitute monographs of the diseases which they describe The last part, by Professor Deutschmann, is particularly worthy of consideration, since it gives the details of 101 cases of detachment of the retina treated by himself and his colleagues by an operative procedure which he has devised and practised The method of operating consists in transfixing the globe with a narrow double edged knife in such a manner as to make the wound in the globe subconjunctival, the knife passing through the sclerotic, choroid, and retina into the vitreous The point of the knife enters the eye below and to the outer side where the retinal detachment is usually situated and emerges at a somewhat higher level on the inner, lower, and posterior surface In withdrawing the knife t is made to divide the vitreous by lateral movements to a moderate extent The section is performed painlessly under an injection of cocaine solution to which a few drops of perchloride of mercury have been added and the pupil is dilated with atropine Professor Deutschmann has lately conjoined with this method of operation a second proceeding which consists in the injection of the vitreous humour of a

MEMORIAL

TO THE

COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Society of Members of the Royal College of Surgeons of England.

THE Committee of this Society take the opportunity willingly and generously granted to them by THE LANCET of appealing to every Fellow and Member the College to sign the Memorial which will be ind over leaf

The Committee feel that it is unnecessary to enter to a detailed discussion of a matter which has been ore or less before the profession for fifteen years For the information of those who are not fully quainted with the question at issue between the ouncil and the Members of the College, it may be ortly stated as follows —

1 The Council is the governing body of the College and ssesses absolute powers

2. The Council is elected solely by the Fellows under the harter of 1843.

3 According to the last Calendar there are 17,199 embers and 1195 Fellows

4 The property of the College is by the original Charter 1800 entirely vested in the Members, for whom the ouncil acts as Trustee

5 The Fellows, as such have no interest in the College roperty except in so far as they are also Members

6 As shown by the balance sheet by far the largest ource of the College income is derived from the Members' ayments

7 The Council has now to deal with many matters ffecting the welfare and discipline of the Members, with ome of which it has shown itself to be imperfectly cquainted.

8. The Members, therefore, propose that a small increase e made by Charter in the number of the Council and that Members shall have the right of election to these additional eats

9 At every annual meeting of Fellows and Members (Instituted in 1834) this or some similar proposal has been carried practically unanimously, and a petition in its favour was signed by nearly 5000 members and presented to the Privy Council

10 The Council have twice taken a poll of the Fellows on the question, but on neither occasion has an absolute majority voted against the proposal, while many were in its favour

11 It is generally felt that it would be a gracious act on the part of the Council to embody some compliance with the Members' wishes in the new Charter for which they are now about to apply, and that this is a most opportune moment to effect a termination of the controversy

Mr Jonathan Hutchinson, F R S, F R C S, ex-President of the College, says, in a letter headed "The College of Surgeons and its Members" —

We are told that "Members have no right, legal or inherent, to a share in the government of the College" Now, without doubting the law of the matter, may I still ask whether they do not possess a moral right—that is, a right founded upon the justice of the case? If a *de novo* scheme of government were to be devised for such a body as the College now is, with its thousands of Members and hundreds of Fellows, can anyone believe that the former would be wholly excluded from power?

Let me, however, very seriously ask Has not the time arrived to put aside all arguments based upon "legal or inherent rights" and definitions of the "body-corporate," and ask simply whether or not it will be for the good of the profession that the Members of the Royal College of Surgeons should be admitted to some share in its government? For myself, most unhesitatingly do I believe that the advantages would be great The present system puts the management of the affairs of the College wholly in the hands of operating or, in other words, of hospital surgeons Now, to them very suitably appertains the chief share but not the whole The questions with which the Council has to deal require wider sympathies and first-hand experience of a more extended kind than are possessed by any one class It is all very well

to suggest that the College has no other than merely surgical objects and to try to impute to reformers the desire to make it a "political" tribunal However willing we may be to leave all social and State questions to the British Medical Association and to wash our hands of "politics," the thing is as impossible as it is inadvisable The College of Surgeons will always, it is to be hoped, take a foremost place in all schemes for the development of medical education It will still be consulted by the Government of the day on many questions, such, for instance, as the Midwifery Bill and the Vaccination Laws It cannot, if it wishes, shroud itself in privacy or reduce itself to insignificance That it should deal with such matters as I have mentioned with effect and judgment it seems to me most desirable that it should have at its Council board men well informed in their details and at its back the sympathies and support of a large body of the profession Its organisation ought to be widely and not narrowly representative

The admission to its Council of half a dozen well informed men familiar with the details of family practice and with the educational wants of the great bulk of the profession would, I feel sure, be a distinct gain Nor would it do any real injury to the status or privileges of the Fellowship I doubt if anyone ever seeks the Fellowship for the sake of the vote which it gives and whether the number of candidates would be in the least diminished by the change The diploma of the Fellow will still carry superior privileges as to the eligibility and voting, and it will always remain an essential passport to most hospital appointments Everyone will still continue to recognise in the letters F R C S a guarantee that their possessor has been specially trained as a scientific and operating surgeon There is no real ground for fear that the two grades, Membership and Fellowship, will ever be more confused together than they are at present Already it is to be noted the College has made Members eligible for some of its offices—as examiners, professors, and prize takers Let us not uselessly prolong a half hearted controversy the final end of which may be easily foreseen To concede graciously is the art of all concession, and the longer this matter is kept in debate the less will be the gracefulness of the final yielding I am impressed, therefore, with the conviction that the admission of a limited number of Members to the privileges which they seek will be to strengthen the College itself and to increase its usefulness to the community

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All Fellows and Members who can possibly do so are specially urged to attend a General Meeting which has been summoned at the College for Wednesday week, July 5th, at 3 p m, to discuss the terms of the proposed Centenary Charter

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Any Member who is desirous of giving practical support to the efforts of this Society to obtain a reasonable reform will oblige by filling up the subjoined and returning it together with the signed Memorial —

I desire to join the SOCIETY OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, *and I enclose the Annual Subscription of Two Shillings and Sixpence*

Name _____

Address _____

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Society of Members of the Royal College of Surgeons of England.

11, ADAM STREET, STRAND, W C

President—Mr JOSEPH SMITH

Vice-President—Dr DANFORD THOMAS

Hon Treasurer—Mr GEORGE BROWN

Hon Secretary—Mr W G DICKINSON

Committee—Dr THOMAS MORTON, Dr HERBERT SNOW, Dr F H ALDERSON, Mr BRINDLEY JAMES, Mr J C SMITH, Dr WINSLOW HALL, Mr HENRY KIALLMARK, Dr PERCY ASHE, Dr H J MACFVOY, Mr MONTAGUE SIMPSON, Dr A C MAYBURY, Mr H J THORP

To the President and Council of the Royal College of Surgeons of England

GENTLEMEN,

We, the undersigned Fellows and Members of the College, desire to make the following representation to you

We have heard with satisfaction of your intention to apply for a supplementary Charter in order to fittingly celebrate the Centenary of the granting of the original Charter in 1800 We cordially endorse the proposal that you should obtain powers to confer the Fellowship of the College on persons of distinction who are not Members We further very sincerely wish that the celebration of this Centenary may be marked by the harmony and good feeling between all parts of the Corporation which ought to distinguish such an occasion.

We therefore very respectfully suggest to you that an extremely favourable opportunity now presents itself for the satisfaction of that desire which has at various periods during the century, and especially during the last 15 years, been expressed by a large number of the Members of the College—viz, that they should be represented on the Council

We do not intend to repeat the various arguments in favour of this proposal, as these must be well known to you, but, in the words of a former Petition, "we submit that it would be both equitable and politic that the Members should have a voice in the conduct of a Corporation of which they are, and always have been, numerically and financially the mainstay"

We would point out that this statement has been endorsed by at least one former President, by many Fellows, by some 5,000 Members, and by the entire Medical Press, that it has never been seriously challenged, but that the objections to it have rested mainly on the ground of the apparent interference with the prerogative of the Fellows We are convinced that the difficulties in the way are by no means insuperable, and we earnestly trust that the Council will make the settlement of this long standing controversy a prominent part of the Centenary celebrations

We respectfully bring this matter under your notice at the present time, in full confidence that you will deal with it in an equitable and dispassionate manner, and in accordance with the general sense of the profession at large

NAME	ADDRESS

Halfpenny Stamp

TO THE HONORARY SECRETARY,

Society of Members of the Royal College of Surgeons of England,

11, ADAM STREET,

LONDON, W C

young rabbit into the globe For this purpose Luer has constructed a knife for him which is perforated like a wasp s sting lengthwise and has a linear opening near the extremity to which he has given the name of "Messerkanüle" or "knife cannula" Connected with the base of the knife is a syringe In using this instrument Professor Deutschmann endeavours to drive the rabbit's vitreous into the pre-retinal space—that is to say, into the space between the detached retina and the shrunken vitreous Professor Deutschmann appears from the reports of his cases to have met with encouraging success and though in many of his cases no benefit accrued to the patient in others the improvement was marked and permanent

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An American Text book of Genito-Urinary Diseases, Syphilis, and Diseases of the Skin Edited by L BOLTON BANGS, M D, Consulting Surgeon to St Luke's Hospital and the City Hospital New York, &c, and W A HARDAWAY, A.M, M.D, Professor of Diseases of the Skin and Syphilis in the Missouri Medical College, St Louis, &c Illustrated with 300 Engravings and 20 full page Coloured Plates London The Rebman Publishing Co 1898 Imperial 8vo In two volumes, pp 1229 Price 42*s*

THERE is no natural union between diseases of the genito-urinary system and diseases of the skin, but custom has sanctioned the association of the two, both in professorships and in treatises, the connecting link is syphilis, which may be said to belong to both, yet as these two classes of diseases are essentially distinct it would be well to deal with them in separate treatises These two handsome volumes belong to the now well known series of American text-books issued by the Rebman Publishing Company and they are fully up to the high level hitherto maintained by that series The editors have been assisted by 45 writers in the arduous work of preparation of this large treatise, and their names are sufficient to guarantee that the contents fully represent the knowledge of the present day Of the first portion of this work the longest and the most important contribution is an article on the Diseases of the Male Urethra, by Dr G Frank Lydston This occupies nearly 130 pages, and the very full account of stricture deserves especial mention Urethral fever is considered by the author to include six forms of morbid phenomena, which, however, may be combined in different ways in different individual cases The six forms are—(1) a nervous rigor, not succeeded by fever, caused by slight surgical shock, (2) traumatic fever, due to excessive reaction from surgical shock, with decomposition of fibrin-ferments, (3) toxæmia following severe shock with perversion of the urinary secretion, and reflex inhibition of the function of the kidney, (4) septicæmia and pyæmia, (5) chronic urinary fever attendant upon obstructive diseases of the urinary organs, and (6) mixed forms We agree that under the head of urethral fever many different diseases are included, but we are inclined to think that Dr Lydston's classification is unnecessarily complex. There are probably three elements which may in any case be combined in any proportion, the three elements are—(1) a nervous element, (2) a septic element, and (3) an element connected with the irregular activity of kidneys damaged by preceding disease By these three elements can be explained all the varied phenomena met with in individual cases

Dr J William White and Dr Alfred C Wood have contributed the article on Diseases of the Prostate and describe very completely the advantages and disadvantages of castration for hypertrophy of the prostate, a method of treatment which was introduced by one of the authors (Dr White)

The articles on Syphilis occupy 140 pages and have been written by seven authors The description of the syphilitic diseases of the eye and the general treatment of syphilis deserve special commendation

The section on Diseases of the Skin commences with an account of its anatomy and physiology and chapters follow on general etiology, pathology, and diagnosis Dr. Hardaway's classification is simple and useful but we must confess to a little surprise at finding "tattooing" amongst the "hypertrophies" Dr Hardaway also contributes the article on Eczema and this disease is undoubtedly ably described, but the author does not in its etiology attribute much importance to the action of bacteria The section on Treatment is good, the fact that it contains 57 formulæ shows how difficult the treatment of eczema sometimes is The only other article needing mention is that dealing with Tinea Tonsurans The author, Dr W T Corbett, on the whole accepts Sabouraud s theories and he gives a useful account of the treatment of this troublesome disease

Although this work is in two volumes the pagination runs on This makes it a little difficult to use the index which, however, is very elaborate and convenient The book is very fully and adequately illustrated and the 20 coloured pl tes are well executed

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A Synopsis of Surgery By R F TOBIN, F R C S Irel Surgeon to St Vincent's Hospital, Dublin London J & A Churchill Dublin Fannin and Co and W McGee 1898 Pp 277 Price 6*s* 6*d*

THE material of which this book is composed was originally issued by the author to the members of his clinical class in the form of leaflets and they were intended in the first place to systematise the teaching and in the second place to save the students taking notes There is much to be said for the author's contention that clinical teaching should be more systematic than it too often is and we think that notes like those contained in this volume might prove very useful Of course, a student should fully understand that a volume like the present is no adequate substitute for one of the ordinary text books on surgery, but used as an addendum this little book may readily prove of service The statements are clear but brief and may make a more lasting impression on a student's mind than more verbose descriptions The work is very neatly and strongly bound and the inter leaves of plain paper are convenient for students' notes

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The Factory Laws of European Countries By EMMA BROOKE London Grant Richards 1898 Pp 52

THIS is a very useful, systematic, and brief compilation of the legislation of the different European countries in so far as it relates to the hours of labour, to the laws affecting the work of women, young persons, and children, and the restrictions enforced in regard to unwholesome industries In a word, we have a bird's-eye view of the labour protective legislation of Europe We can see at a glance which are the most progressive and which are the least advanced among the nations of the Continent Of course, such a book can only be used as a sort of guide and basis for the study of the grave problems involved It does not suffice to know what the laws of a country are, we must also be well informed as to the social condition of the country and as to the manner in which the law is applied, but such details would fill volumes The little book before us deals only with the laws, though here and there a hint is given that the knowledge of the law by itself is not enough Thus undoubtedly Switzerland, especially the cantons of St Gall and Zürich, is among the most advanced nations of Europe in regard to labour legislation and yet there are practically no laws controlling the work in mines This, however, does not mean that Switzerland is behindhand but simply that there is hardly any mining industry in that

country On the other hand, it has been truthfully, if some what sarcastically, stated that the "exploitation of the foreigner" is the principal industry of Switzerland This, of course, means the employment of an immense number of servants and waitresses in hotels, restaurants, &c In other countries there are hardly any laws protecting this form of domestic work, but the Federal law gives power to the cantonal authorities to decide what places shall be brought under the factory legislation and the law of the canton of St Gall especially extends such Acts to cafés and hotels Altogether this is a useful little book, so brief and full of information that it might be called a dictionary of labour legislation

LIBRARY TABLE

The Temples and Ritual of Asklepios at Epidaurus and Athens By RICHARD CATON, M D Edin, F R C P Lond Reprinted from "Otia Merseiana" 1899 Pp 42 —Lovers of medical archæology owe a debt of gratitude to Dr Caton of Liverpool for the publication in book form of the two lectures delivered by him last summer at the Royal Institution of Great Britain Written in an attractive style and illustrated on almost every page with photo-prints of buildings and statues, this little volume is an admirable handbook to historical localities of exceeding interest Lecture I deals mainly with architectural and structural details of temples and shrines, the last of the illustrations showing the seats reserved in an Athenian theatre for the priest of Asklepios and the priest of the Muses In Lecture II Dr Caton discusses the ritual of the shrines and the accommodation and treatment of the sick who frequented them The similarity of human nature in all ages and the credulity of patients twenty centuries ago are here attested by translations of inscriptions recording many cures too marvellous to be true Dr Caton's tour in Greece has supplied him with a congenial theme and the illustrations from photographs taken by himself add to the vividness of his descriptions

Lippincott's Pocket Medical Dictionary Edited by RYLAND W GREENE, A.B Philadelphia and London J B Lippincott Company Pp 421 Price 5*s* —This little book deserves recommendation as a useful work of reference The type being small but clear and the paper thin but good the editor has been able to condense a large amount of information into small compass In general a line is given to each of the 20,000 words explained, but under certain special headings this allowance is greatly exceeded For instance, the varieties enumerated and defined under Bacillus and Bacterium occupy about 160 lines (three pages) In a dictionary for the pocket portability is an essential quality. Those who require a more comprehensive work will find a very complete collection of terms used by medical and biological writers copiously explained in Lippincott's Medical Dictionary (1154 pp in double columns) published in 1897 The two dictionaries, the large and the small, are by the same editor

Official Year book of the Scientific and Learned Societies of Great Britain and Ireland London Charles Griffin and Company 1899 Price 7*s* 6*d* —This is the sixteenth annual issue of a work which is something more than a handbook of reference, inasmuch as it forms an index of the scientific work of the year as well as affording information with regard to the names of officers, the times of meeting, conditions of membership, &c The various scientific societies are conveniently arranged under 14 heads Medicine occupies 47 pages, as compared with 275 pages devoted to other and cognate branches of science There is a very complete index and the book is a really useful publication

Analytical Records

FROM

THE LANCET LABORATORY

UROSIN

(ZIMMER AND CO FRANKFORT-ON THE MAIN AGENTS: WIDELMANN, BROICHER, AND CO, 33, LEIGH STREET E.C.)

UROSIN is the interesting compound of quinic acid with lithia As is well known quinic acid is the chief organic acid of cinchona bark, it occurs also in the bilberry plant and in some fruits, as the strawberry and cherry Lithia in association with quinic acid is said to prevent the formation of uric acid, thus differing from other drugs regarded as of value in gout which at best claim to be solvents of uric acid Lithium quinate is a light white crystalline substance responding readily to the reactions for both quinic acid and lithia Thus it burns with a brilliant crimson flame and yields iodoform on treatment with potash and iodine An interesting clinical contribution on the treatment of uric acid diathesis by quinic acid appeared in the *Berliner Klinische Wochenschrift*, 1899, No 14, in which it was shown by the author, Dr J Weiss of Bâle, that quinic acid possesses the property of considerably decreasing the formation of uric acid in the organism According to this the compound of quinic acid with lithia—namely, urosin should be of a promising character as a therapeutic agent in gouty affections The tablets examined contained each seven and a half grains of the drug Urosin is also supplied in the form of effervescent tablets and a pleasant way of exhibiting the drug is in aerated water

OLD COGNAC BRANDY

(EDWARD ARCHER AND CO. GREAT MALVERN)

The analyses of the two specimens of Cognac brandy submitted for analysis, which are distinguished by different labels, were as follows No 1 alcohol by weight 39 80 per cent, by volume 47 13 per cent, equal to proof spirit 82 59 per cent; alcohol in volatile ethers, 0 0193 per cent, extractives, 0 62 per cent, mineral matter, 0 01 per cent, acidity reckoned as acetic acid, 0 033 per cent No 2 alcohol by weight 39 30 per cent, by volume 46 59 per cent, equal to proof spirit 81 64 per cent, alcohol in volatile ethers, 0 0184 per cent, extractives, 0 71 per cent, mineral matter, *nil*, acidity reckoned as acetic acid, 0 031 per cent Both specimens possessed a desirably soft and mellow flavour characteristic of matured spirit Specimen No 1 is probably the older of the two since it contains a slightly higher percentage of Cognac ethers than No 2. The features presented in this analysis are satisfactory and, coupled with the general characters of taste and smell, warrant the recommendation of both brandies for medicinal purposes Both specimens evinced an excellent development of those fragrant and aromatic characters peculiar to genuine and matured brandy

EFFERVESCENT CARLSBAD WATER LENTIFORMS

(W R WARNER AND CO PHILADELPHIA AGENTS: F NEWBERY AND SONS, KING EDWARD-STREET, NEWGATE STREET E C)

These lentiforms contain, of course, sulphate of soda as the chief representative salt of the Carlsbad waters They afford a briskly effervescing draught when dissolved in water Their convenience in use is obvious

TOILET AND MEDICATED SOAPS

(EDWARD COOK AND CO EAST LONDON SOAP WORKS, BOW E)

The list of this firm is replete with every variety o soap and of the specimens which we have examined in THE LANCET laboratory all come correctly under

the quality described—namely, pure The soap basis is of excellent quality, in which fat and alkali are balanced as closely as skill and scientific manipulation in manufacture will allow The soap known as "Cambath" is a very useful and agreeable soap for the bath As its name implies it contains camphor, certain aromatics, and a well known antiseptic which is soothing and beneficial to the skin In some measure it is a preventive against the attacks of insect pests, It has a pleasant, stimulating action upon the skin and is an agreeable and effective detergent "Riviera" soap is slightly superfatted, the fat employed for this purpose being readily absorbable by the skin On examination it showed an excellent degree of purity "Russian Violet" toilet soap contains an equally excellent and satisfactory soap basis but in addition it is delicately scented with a fragrant perfume The special antiseptic soap made by this firm deserves greater attention than has hitherto been paid to it by surgeons and others It contains the double iodide of potassium and mercury, which, according to bacteriological experiments, has even stronger germicidal powers than corrosive sublimate As is well known the red iodide of mercury is completely soluble in a slight excess of potassium iodide The resulting double iodide is quite compatible with soap, whereas corrosive sublimate is incompatible with soap A bin iodide toilet soap is thus prepared as is a special antiseptic soap for medical purposes containing from ½ to 3 per cent of mercuric iodide Lastly, we have examined a specimen of "hygienic tooth" soap in which are combined antiseptics, astringents, aromatics and antacids in suitable proportion forming a very agreeable soap compound for the cleansing of the teeth Here, again, the soap basis is of the purest character

(1) CHEMICAL FOOD LOZENGES, (2) ASEPTIC SPONGE AND (3) ANTISEPTIC VAGINAL CAPSULES

(SQUIRE AND SONS 413, OXFORD-STREET W)

The above articles represent some of the newest additions to the list of this firm On examination the chemical food lozenges proved to contain the ingredients of a well known and admittedly valuable formula. The lozenges afford a convenient and easy means of exhibiting "chemical food" The aseptic sponge consists of a flat compressed disc of wool which swells up enormously when placed in water, absorbing as a matter of fact as much as 10 times its own weight of water The antiseptic vaginal capsules afford an accurate and excellent method of administering medicaments per vaginam They consist of cotton wool plugs contained in soluble carbolised gelatine cartridges The cartridges were quite soluble in luke warm water A string is attached to the plug and passes through a small hole at the top of the cartridge. By means of these capsules the administration of a known amount of substance is ensured, there being no loss through the handling of the plug or when it is being placed in position

MEAT AND MALT WINE

(LAMB AND WATT 48, ST ANNE STREET LIVERPOOL)

The analysis of this wine was as follows Alcohol by weight 14 91 per cent, by volume 18 36 per cent, equal to proof spirit 32 19 per cent, total residue, 8 47 per cent, sugar, 5 10 per cent., and mineral matter, 0 25 per cent The quantity of proteid matter found by the bromine method was 0 042 per cent This bears out what we have so frequently stated, that in preparations of this class there is, as a rule, very little real nutrient matter for the simple reason that the proteids of meat are not soluble in fluids containing as much alcohol as does this wine But such preparations may contain the [illegible] line extractives and stimulating principles of meat and may thus exercise a favourable effect upon the processes of nutrition The wine under examination possessed a pleasant malty flavour and it is evidently prepared with a sound port wine

SPLENCAROB

(THE SOLID SOUP SYNDICATE, OLD VICARAGE HOUSE, WALSALL.)

Under this curious title is comprised a dry soup powder Microscopical examination makes the composition of the powder pretty obvious. It is composed of pulse food cereals and vegetables On soaking in water and subsequently making up to a pint and gently boiling for half an hour a soup of excellent flavour, due largely to a careful choice of aromatic herbs, &c, is obtained It is said that no less than 20 ingredients are used The powder is excellent for the easy preparation of a cheap and nutritious soup while also affording a suitable adjuvant for stews or "stock"

BLACKBERRY BRANDY

(C WRIGHT AND SON WIRKSWORTH)

The analysis of this preparation, which may be regarded as a new liqueur, was as follows Alcohol by weight 22 08 per cent, by volume 26 95 per cent, equal to proof spirit 47 23 per cent, extractives and sugar, 15 33 per cent, and mineral matter, 0 15 per cent The preparation has a very agreeable flavour of the blackberry and is delicately astringent On adding perchloride of iron a black colour is produced characteristic of tannin compounds The brandy used is said to be old French Cognac and the flavour is decidedly soft, which to some extent is proof of its maturity The tonic properties of the preparation may be referred to the peculiar principles of the blackberry

New Inventions.

THE "GERSAP" APPARATUS

THIS apparatus is designed for automatically impregnating the air of closets, lavatories, and other places where such procedure is desirable with a suitable deodorant and disinfectant At the same time a self acting arrangement is also attached so that the contents of the closet pan are to some extent rendered inoffensive Once fitted the apparatus gives no trouble and works, as we have found in practice, satisfactorily Over the door of the lavatory is placed a cylinder into which a piston with a plunger attached is fitted air tight The act of opening the door drives the plunger from one end of the cylinder to the other and thus pushes a column of air through a small pipe into a closed box The box contains a certain agreeable antiseptic fluid which by means of an ordinary spray apparatus is diffused into the air in the form of fine spray by reason of the force of air acting upon the fluid when the door swings The action is thus perfectly automatic Instead of the door serving to force a column of air into the diffuser in this way the lid of the closet seat may obviously be made to bring about the same action The apparatus is very cleanly in action and produces a very agreeable effect upon the air of the lavatory, and without the least trouble The offensive condition into which lavatories and water-closet chambers often lapse is only too well known, but by means of this ingenious contrivance such an objectionable condition is easily avoided The Gersap Company, of 6, Philip lane, E O, have, we understand, fitted this apparatus to the lavatories of several corridor trains and of hotels, restaurants, and other places The apparatus is kept in working order by the company for a small annual charge

THE LANCET.

LONDON SATURDAY, JUNE 24, 1899

THE President of the General Medical Council did well to direct the preparation of a narrative of the case of HUNTER v CLARE and the Council did equally well to have it inserted in the minutes which are now public property for the use of all who are interested in the case For the case is one of which it is difficult to get a perfectly impartial and unprejudiced impression, as all our readers know who have followed the correspondence, leading articles, and signed communications which have appeared in our columns The sad death of Mr HUNTER in the middle of the litigation imported into it an element of pathos which must not be allowed to affect our judgment, but which has certainly had its influence upon many members of the profession

The case divides itself roughly into two stages—that in which the use of the title "M D" on the strength of possessing a medical degree from the Jefferson Medical College, U S A, was the chief subject of complaint, and a later stage in which this charge dropped out and the use of the titles "Physician and Surgeon" became the only matter in dispute To the charge of using the title "M D" no further reference than this need be made Mr HUNTER was a genuine M D of the Jefferson Medical College of Philadelphia,[1] and this institution is duly recognised by the General Medical Council as one granting proper scientific degrees which are even registrable under certain conditions[2] On the second charge the Society of Apothecaries of London came to the help of Mr HUNTER, who now got into a fighting humour, for he said on Sept 30th, 1897 "As I am being 'backed up' I mean to fight now to the end" Such a humour is somewhat infectious and the Penal Cases Committee of the General Medical Council caught the fighting spirit with an alacrity that might well have been reserved for a more fitting case Acting on the suggestion of Mr MUIR MACKENZIE that the case "raised in a convenient form issues of law and fact" the committee sent the case to the General Medical Council to consider whether it would be advisable for the Council to institute a prosecution The Council after hearing the opinion of Mr MUIR MACKENZIE resolved on the prosecution When the summonses came to be applied for it was found that the use of the title 'M D" had been discontinued, whereupon summonses were applied for in regard to the use of the titles of "Physician and Surgeon" respectively The magistrates considered the case governed by the well known case of Regina v Baker and fined Mr HUNTER £5 for using the title of "Physician" Mr HUNTER'S counsel asked the magistrates to state a case, which they agreed to do The summons in respect of the user of the title "Surgeon" was not proceeded with The magistrates then stated a case for the opinion of the Court of Queen's Bench After setting forth the facts the questions of law stated were (*a*) whether or not the appellant (Mr HUNTER) holding the title of L S A. and being registered as such is authorised to take or use the name and title of "Physician" in the manner the appellant used it, (*b*) whether, on the facts herein stated, the magistrates were right in finding that the appellant so described himself wilfully and falsely within the meaning of 21 and 22 Victoria, Chap 90 As our readers know,[3] the judges, Mr Justice LAWRANCE and Mr Justice CHANNELL, decided in answer to the first question, (*a*), that the magistrates were right and that Mr HUNTER was not right in using the title of "Physician" As to the second question, (*b*), they decided that the magistrates were wrong They quashed the conviction on the ground that Mr HUNTER had some colour or title to use the description which he did use, especially having regard to the directions issued by the Society of Apothecaries

Such are the facts of this case on which so much strong feeling has been expressed that the outlines of the picture have been obscured by the intrusive colouring of some of the details The discussion of the case in the General Medical Council threw no additional light upon it, but neither the lawyers of the General Medical Council, its Penal Cases Committee, the Council itself, nor the Society of Apothecaries of London can be held quit of blame We think, as the judges thought, that the answer of the Society of Apothecaries to Mr HUNTER'S inquiry whether the diploma of the Society entitled him to use the title of "Physician" was very uninforming It runs as follows —

"The L S A (1886) can call himself by any title which he prefers to adopt denoting the right to practise medicine, surgery, and midwifery, provided that he does not directly or indirectly assume a title conferred by another licensing body or university"

Again, we think that a registered member of the profession labouring under a definite accusation is entitled to more definite answers to questions as to what he may do than those which Mr HUNTER received from Mr FARRER, though it must be admitted that the tone of Mr FARRER'S letters was kind, and constantly recognised as such by Mr HUNTER The General Medical Council is not a legal court but rather a body from which a medical man has a right to expect some friendly guidance and more than a bare answer as to what he may not do It is possible that a little more explicitness on the part of the Society of Apothecaries or Mr FARRER might have saved Mr HUNTER the worry of a prosecution which according to some affected his health fatally But it is difficult to be sure on this point A perusal of Mr HUNTER'S letters does not give us the impression that he was much averse to a little fighting He believed that he was doing right in calling himself a "physician" (as many good lawyers do in spite of the recent judgment) and he had the courage of his opinion, and when the Society of Apothecaries came quickly to his support we believe that he was ready enough to go on. The General Medical Council and the Penal Cases Committee must be blamed for allowing themselves

[1] THE LANCET April 22nd, 1899.
[2] The current Medical Register p. 85.
[3] THE LANCET, Jan. 28th 1899 p. 257

too easily to be induced to try to get a somewhat small question of law settled As a result the judgment satisfied neither side and will have in its turn to be reconsidered We trust that all will recognise that the matter is now one which should be discussed apart from personalities Not a scrap of evidence has been forthcoming that the General Medical Council treated Mr HUNTER in any way maliciously They selected him with some infelicity as a man whose prosecution would settle a vexed point Mr HUNTER was prosecuted, but the point remains vexed As further controversy is therefore inevitable we hope that the medical profession will rather look forward to a happy solution than backward at past errors of judgment The medical profession is no longer divisible mechanically into apothecaries, surgeons, and physicians, and the sooner law and the interpretation of the law are brought to recognise this equality before the law of all registered medical practitioners the better.

It was in defence of this principle that Mr HUNTER fought every whit as much as in assertion of his private beliefs, and while registering here our sense of his courage and of the peculiar sadness of his death we would remind our readers that their contributions are earnestly solicited in our columns to a fund for his sorrowing widow

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IN THE LANCET of June 10th we published the abstract of an Oration on Medicine by Dr J O WILSON of Philadelphia, entitled "A Century of Medicine in America" The address was appropriately delivered at the fiftieth meeting of the American Medical Association, held at Columbus, Ohio, on June 7th There is much that is interesting in Dr WILSON'S remarks in addition to his comments on the advance of medical science in America He referred to the introduction of vaccination and the introduction of the stethoscope and auscultation, to VIRCHOW'S great work on "Cellular Pathology as based upon Physiological and Pathological Histology", to the introduction of bacteriology, to the discovery of LISTER, and to numerous other discoveries which have proved landmarks in medical science But the main object of the discourse was to note the position of the United States in regard to modern medicine The orator cannot be accused of exaggerating the work done by American investigators, his remarks showed good and calm judgment He remarked that "the latest work of investigators in every field of research and in every country is quickly before us and we give something in return," and he drew attention to the investigations of Professor J K MITCHELL who was "the first to approach in a scientific spirit the nature of infective disease and particularly in malarial fever," and to the confirmation in America of LAVERAN S observations on the malarial parasite by COUNCILMAN, OSLER, and THAYER was also referred to The work of BRAND in the treatment of enteric fever by systematic cold bathing, and the [successful treatment of neurasthenia by MITCHELL also received well-merited praise In surgery the names of O DWYER, SENN, MURPHY RICHARDSON and others will always hold a high place In this connexion the reports issued from the laboratories of the Johns Hopkins University must be mentioned, some of the work which has there been carried out being valuable contributions to medical science

Dr WILSON pays due attention to medical literature To two publications in particular the whole medical world is indebted When a writer wishes to refer to the literature of any medical subject he naturally turns over the pages of either the "Index Catalogue of the Library of the Surgeon General's Office of the United States Army"—a most stupendous work—or those of that unique and most useful of medical literary productions the "Index Medicus" Too high praise cannot be given to the industry and perseverance necessary for the compilation of these volumes, as a record of medical literature they are most complete and their value can scarcely be over rated The work now in course of publication, "The Twentieth Century Practice," we have frequently referred to in our columns in favourable terms Many excellent text books have also emanated from American authors OSLER'S "Principles and Practice of Medicine" can successfully rival any other similar manual, and many works of equal excellence on special branches of medical science could also be mentioned, bringing well earned renown to their writers Turning to American journalism we cannot speak in such high praise Some of the weekly publications are of first-class quality, such as the Journals of Boston, New York, and Philadelphia, and the journal of the American Medical Association, but on the other hand there are numerous other monthly and quarterly "journals" appearing in various parts of the United States the disappearance of which would be a loss to no one The contents are mainly extracts from other papers and the profuse interleaving of advertisements is highly objectionable It is probably mainly due to this feature that many of these periodicals owe their existence Then there is another class of publications appearing under various fantastic titles which are issued solely as advertisements of some firm of druggists or even as a "puff" of a particular drug, and are scattered broadcast, at any rate throughout this country To the undesirability of such action we have already referred, the means entirely defeats the object for which they are distributed, and the great majority of the pamphlets find their way into the waste-paper basket without the cover being removed The publishers of these advertisements would be well advised to close the distribution of such booklets, for they not only bring the preparations which they praise into disrepute, but likewise tend to lower the prestige of the American medical press generally

Dr WILSON dwells at some length on the influence which the American Medical Association should exert on medical education and medical ethics Great advance has already been made in most of the American medical schools the course of study being closely approximated to that which is required in the English schools of medicine A few years ago a sad state of affairs existed in some of the States, but this has fortunately been altered Much, however, remains to be accomplished, and Dr WILSON asks for more uniformity in the requirements for admission to a degree, a systematic graded course, with uniform tests at the end of each year, and uniform requirements for graduation He also asks for general uniformity in the examinations for the licence to practise among the States and a general reciprocity

among those boards by which the licences may be transferred All this is highly desirable, as are also many other recommendations to be found in Dr WILSON'S paper The last proposition, however, is the most original—namely, that the American Medical Association "should exert its influence to secure the appointment of a Secretaryship of Public Medicine, the portfolio of which should be assigned to a medical man, to the end that the President may be promptly and authoritatively advised concerning technical questions of vital importance to the welfare of the nation" Such an appointment presumably would be analogous to what we have often suggested in this country, namely, that of a Minister of Public Health

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CEREBRO SPINAL fever, or, as it is more usually termed, "epidemic cerebro-spinal meningitis," is a disease of which fortunately we have had scanty experience in this country Dr J A ORMEROD, writing in Professor CLIFFORD ALLBUTT'S "System of Medicine"[1] gives an account of the outbreaks which have occurred in the United Kingdom since 1807 None of these has been widespread, but, as the same writer points out, there are many reasons nevertheless why we should not neglect the study of the malady its historical and geographical interest is great, its exact etiology is still a matter of dispute, and a country hitherto comparatively immune cannot expect always to escape epidemics in the future In this week's issue we publish an abstract of the Cavendish Lecture on the Etiology and Diagnosis of Cerebro spinal Fever, delivered before the West London Medico-Chirurgical Society by Dr OSLER, Professor of Medicine in the Johns Hopkins University, Baltimore Dr OSLER'S powers of observation are so well known that great weight will necessarily be attached to the conclusions at which he has arrived and there are several points in his lecture which materially add to our knowledge of the etiology and diagnosis of the disease.

Dr OSLER first refers to the points of resemblance which exist between cerebro-spinal fever and pneumonia The general relations are the same in both diseases and the two may prevail together The abrupt onset, the great frequency of herpes in both, the leucocytosis, and the almost identical characters of the fibrino-purulent exudate in the two diseases (as drawn attention to by Dr NETTER) and the frequent complications of pneumonia in epidemic cerebro spinal fever and of meningitis in pneumonia are additional points of interest But, on the other hand, Professor LEICHTENSTERN points out various differences, such as that pneumonia is a disease spread over the entire earth and appears at all times, whilst cerebro-spinal fever is very rare and in many countries is as yet unknown, also that pneumonia attacks every age, whilst epidemic meningitis is a disease which affects children and young people

Especial interest will be taken in Dr OSLER'S remarks on the bacteriology of cerebro spinal fever Dr ORMEROD in his article says that bacteriologists are at a disadvantage in this matter because since their science has established itself there have been no large epidemics of meningitis and therefore their researches have been limited to certain minor outbreaks No doubt it is owing to these circumstances that the conclusion was arrived at that the organism associated with epidemic meningitis is identical with, or closely related to, that which is responsible for croupous pneumonia Professor WEICHSELBAUM, however, more than 12 years ago described a diplococcus with special cultural peculiarities which he regarded as the specific organism of the epidemic form of the disease These observations were confirmed by Professor JAEGER in 1895 and have since been corroborated by other investigators This organism is variously known as the meningococcus and the diplococcus intracellularis meningitidis, and according to Dr OSLER is now regarded as the specific cause of the disease The meningococcus has usually a diplococcus form and lies within the polynuclear leucocytes, hence the definition *intracellularis* It is found in the cerebro-spinal exudate, rarely elsewhere in the body, but it has been isolated from the blood, the pus from the joints, the pneumonic areas in the lungs, and the nasal mucus Dr OSLER freely criticises the writings on this subject of Dr NETTER who maintains that the pneumococcus can, without doubt, cause meningitis, we are inclined to agree with Dr OSLER that Dr NETTER'S position is illogical, for the latter towards the close of his article in "Twentieth Century Practice" states that certain peculiarities "prevent us from concluding that the two diseases (i e, pneumonia and cerebro-spinal fever) are absolutely identical" If Dr OSLER'S contentions are right as regards the pathogenic organism a great step has been gained in diagnosis and this is accentuated by the procedure known as "lumbar puncture," introduced by Professor QUINCKE, this enables us to make a prompt decision as to the existence of meningitis, assistance being derived not only from the bacteriological examination of the fluid but also from its general character If the operation is carefully performed fluid is nearly always obtained It may be clear, turbid, purulent, or more rarely of a "browny yellow," or quite bloody In a great majority of the cases when meningitis is present the fluid is turbid Several observers, however, have noted that the fluid may become clear in the intermissions of disease or a clear fluid may be obtained from a puncture in the second lumbar interspace while lower down a turbid fluid may be withdrawn Dr WENTWORTH claims that within certain limits there is some relation between the degree of turbidity of the fluid and the severity of the symptoms and Dr OSLER states that this was borne out by his experiences The number of the organisms found bears no constant relation to the intensity of the symptoms

We have no space to comment on Dr OSLER'S interesting remarks on sporadic cerebro spinal fever Cases occur from time to time in our hospitals which afford interesting studies from clinical, bacteriological, and pathological standpoints Treatment has proved unsatisfactory The mortality is very high, thus of 111 cases occurring in a recent epidemic in Berlin 76 died, a mortality of 68 5 per cent Morphia has been freely given to control the pain and sponging with ice cold water has been employed whenever the temperature reached above 102 5° F Some physicians have claimed beneficial effects from lumbar puncture but experience in this respect has differed greatly

[1] Vol I pp 659 et seq

Dr OSLER concludes that "on the principle of a desperate remedy for a desperate disease the operation seems justifiable in certain severe cases" The cases now met with, however, are so few that considerable time must elapse before anyone is able to speak with certainty on this therapeutic procedure

Annotations.

"Ne quid nimis."

NOSTALGIA

THERE is a malady which boasts of a learned appellation compounded of two Greek words but which is better known by a homelier and far more expressive name in the vernacular, and yet although this binomial disorder is described in the dictionaries as "A vehement desire affecting the physical health," it has not been assigned a place in the Nomenclature of Diseases for which the Royal College of Physicians of London is responsible The fact, too, that home sickness, if impervious to drugs is nevertheless in the highest degree amenable to treatment, might credibly seem to still further justify its inclusion in the official glossary of the 1053 natural shocks that flesh is heir to With regard to the etiology of this unqualified complaint there still remain several points requiring elucidation, albeit in its genesis no bacillus is concerned, nor for its adequate diagnosis is there any need of either microscope or test tube Shortly stated the essential factor in the production of nostalgia is an environment differing from that amidst which the affected person passed his or her early days When this is the case some intangible influence is generated which reacts upon the victim, but just as happens in many official maladies there must first be innate receptivity or preparedness of soil on the part of the individual who succumbs This receptive state is favoured by at least three separate things—race, education, and temperament, but of these predisposing causes the last possesses less power than either of the others *Cæteris paribus*, phlegmatic subjects are more likely to experience home sickness than their sanguine compeers A tendency to despond without sufficient cause undoubtedly subserves towards nostalgia, but ardent, enthusiastic people who continually look forward—who never are, but always to be, blessed—have the advantage, if advantage it be, of remaining immune Education or rather the want of it, is more potent than temperament, the trend of civilisation, which is equivalent to education, being distinctly in the direction of cosmopolitanism. The deeper the ignorance, the ruder the conditions of life under which a human being exists, the greater the probability when exposed to its influence of his acquiring nostalgia If a Gilbert Islander from Tierra del Fuego, for instance, were to be transported to the comparative paradise of the Gilbert Islands in the Pacific Ocean which have been described as "a cluster of pearls hung upon the equator," he would very likely bewail his hard lot and pine for his own inclement and inhospitable wilderness, and if in like manner a Pacific Gilbertian were to be promoted to, say, Pall Mall—which, without wishing to speak disrespectfully of the equator, we maintain to be the more desirable abode of the two—he also would no doubt soon break his heart longing for the delights of his sweltering hut in Micronesia But of the three predisponents race it is which is the strangest and most inconsequential Anglo Saxons and their Celtic brethren vary their manners and customs while abroad to a less extent probably than people of any other nationality, and yet in spite of this they make the best colonists To the Celtic Anglo-Saxon the word "Home" is full of the tenderest and sweetest meaning, in no other language is there a term that fully corresponds with it in breadth and depth of signification Take the French *chez soi* for example how narrow in comparison, how unutterably selfish!—centering the whole interest in the individual, whereas *home* implies the importance of others as well The expression "a solitary home" is sometimes used, but the user must be either thoughtless or an ignoramus, if not both Such an anomaly as a solitary home is impossible, it becomes a den, if not a prison "Be it ever so humble, there's no place like home," and assuredly whoever breaks one up wilfully is guilty of an unpardonable sin There is no human being in existence who can appreciate the charm of a home more exquisitely than the Celtic Anglo-Saxon, and yet he is to be met with in every corner of the world He loves his own native place beyond words, but he can endure enforced expatriation without giving in to nostalgia The fact is, he recognises the futility of kicking against the pricks and so makes his mind up to sacrifice a portion of his life or even, if the worst come to the worst, the whole of it He looks upon querulous repining as a weakness unworthy of a man, and having been denied a home *at home* by fate he is strong enough to accept the inevitable with a good grace For nostalgics we must turn to some other tribe When all is said they remain a narrow minded crew whose mental processes run in grooves They may call their failing by the high sounding name of patriotism but such it is not Nostalgia is a cat's complaint, a purely selfish disorder, whereas love of country can flourish anywhere and takes no account of self And so after all our masters in medicine are perfectly right Nostalgia is righteously excluded from a list of the shocks that Anglo Saxon flesh is heir to

POISONING DURING CHLOROFORM ADMINISTRATION FROM DECOMPOSITION IN THE PRESENCE OF A FLAME

SEVERAL cases of this serious accident have during the last few years been placed on record In the *Boston Medical and Surgical Journal* of May 11th Dr K Wilson has added another case to the list Chloroform was administered to a patient in labour in a small room (12 feet × 13 feet × 8½ feet) where three gas flames were burning In a short time those present felt an irritating sensation in the throat and chest resulting in incessant coughing and gasping for breath which became so violent that the operation—the application of the forceps—could not be proceeded with The cause of the symptoms was not recognised An escape of illuminating gas was sought for and all the windows and doors were opened The operation was concluded under ether, not because chloroform was suspected to be the cause of the trouble but because prolonged anæsthesia was necessary Not long after Dr Wilson noticed the following statement[1] by Emil Aronson "It is best not to use chloroform by gas light, the free chlorine has not only killed the patient, but in a recent case also the physician, and made two nurses sick for some time" Dr Wilson then investigated the literature of the subject Professor Zweifel[2] performed a number of laparotomies under chloroform in a room and in the presence of three gas flames In seven out of nine cases catarrhal pneumonia developed and one ended fatally The symptoms were intense coughing, dyspnœa, and pain in the wounds from the exertion Dr Mey of Herne, Westphalia reported an operation for

1 New York Medical Record, Feb 13 1899 p. 237
2 Berliner Klinische Wochenschrift 18 No 15, p. 318.
3 THE LANCET, Feb 25th, 1893 p. 611.

gunshot wound of the abdomen lasting four hours, during which the surgeons and nurses were overcome by the decomposition products of the anæsthetic One nurse died on the second day after the operation Another case occurred during herniotomy in which three ounces of chloroform were used and half an ounce was spilled accidentally on the floor in a small, badly ventilated room heated by an oil stove and lighted by an oil lamp and a candle [4] The experiments of Stobwasser are important He exposed rabbits and guinea-pigs to air laden with the decomposition products of chloroform and found post-mortem evidence of broncho pneumonia and œdema of the lungs The trachea was deeply congested and both trachea and bronchial tubes were filled with frothy mucus The literature on this subject is now rather extensive and several very important researches have been undertaken to elucidate the causation of the suffocative symptoms referred to by Dr Wilson In 1889[5] Dr D R Paterson of Cardiff narrated a case of exactly similar nature to those given above and at his instance Mr Cundall at the University College, Cardiff, examined the fumes given off by chloroform when evaporated in the presence of a flame and found them to consist of carbonyl chloride, a body discovered by Sir Humphry Davy and by him called phosgene gas, as well as of hydrochloric acid fumes It should be remembered that von Langenbeck pointed out the danger even before Dr Paterson's paper appeared and attributed it to irrespirable carbonyl chloride (chlorkohlenoxyd) The most recent research and by far the most exact is one undertaken by Dr Sebastiano Famulari in the laboratories of the University of Messina His conclusions are that the fumes which have proved so extremely dangerous and even fatal are those of carbonyl chloride and in this he agrees with Professor Ramsay who has also investigated the phenomena The obvious practical lesson to be learnt from these cases and the researches is the inadvisability of using the anæsthetic except from a closed inhaler such as Junker s whenever chloroform is required for operations during which a lamp or illuminating gas is employed Even with the small quantity of chloroform evaporated from the modern forms of Junker's apparatus irritating fumes are given off in small rooms The inconvenience is notably worse in wet or foggy weather It is certainly important that this drawback to the use of chloroform should be widely known Chloroform is a sheet-anchor in midwifery, and unless care be taken and the room in which parturition is to take place be well ventilated and recourse to candles be had, there is always a danger of poisoning by phosgene gas both in the case of the patient and of the medical man

AN INTERNATIONAL CONGRESS OF WOMEN

As our readers are probably aware, an International Congress of Women is about to be held in London under the presidency of the Countess of Aberdeen In the section devoted to the professions which are open to women two discussions will be held on medical subjects On Tuesday, June 27th, in the Council Chamber of Westminster Town Hall, Mrs Garrett Anderson, M D Paris, being in the chair, a paper will be read by Dr Sarah Hackett Stevenson from the United States on the Training and Qualifications of Women Doctors, and in the subsequent discussion Dr Poznansky Garfield of Russia, Dr Tiburtius of Germany, and Dr Aletta Jacob of Holland will take part A paper on Women's Work as Doctors in Hospitals, in Private Practice, and under Government will be read by Dr Stefanofskaia Kosekevitch of Russia and Mrs Scharlieb, M D Lond , of London, and Dr Ellen Sanderlin of Sweden will speak on the subject On Friday, June 30th, papers will be read on subjects connected with nursing, Mrs Neill of New Zealand contributing a paper on the Professional Training or Status of Nurses Mrs Quintard of the United States will read a paper on Naval and Military Nursing, Mrs Hampton Robb will speak on the Organisation of Trained Nurses' Alumnæ Associations and Miss Scovil on Nursing Organisations Many of the papers which are to be read in other sections are of great medical interest and although the direct benefit from congresses of all kinds is apt to be over estimated yet we shall look forward to much good resulting from the discussion of the numerous difficult problems which so vitally concern the well being of half the human race We may mention that the tickets of membership of the Congress, price 7s 6d can be obtained from Miss Teresa Wilson, honorary secretary to the International Council of Women, 36, Victoria street S W

RECURRING TYPHOID FEVER AT CHICHESTER

THE city of Chichester, where typhoid fever seems to have made itself an all but permanent home, is once more the seat of an outbreak of this disease and rumours are current that this recurring malady is due to one and another cause, including the consumption of shell fish—such as cockles—which have had opportunity of becoming contaminated We are unable to learn that the town council are taking any such steps as they should adopt with a view to ascertain what the real cause or causes of this outbreak are, and yet there are few places in this country where more assistance has been rendered to a local authority by way of indicating the line of investigation that should be adopted than is the case with Chichester, which has been visited again and again by inspectors of the central authority It might have been thought that the stigma of the recurrence of a preventable disease such as typhoid fever which attaches to Chichester would in itself have led the town council, as the local sanitary authority, to organise a definite scheme for a complete etiological inquiry into every case of this disease as it arose, but nothing beyond rumours and differences of opinion seem to be available and in the meantime the disease continues its periodic recrudescences

'THE ROADS IMPROVEMENT ASSOCIATION INCORPORATED"

AN association has been incorporated bearing this title and it may interest our readers to know that they can become members on payment of 5s per annum or two guineas for life membership Such payments can be made to the honorary secretary and treasurer, Mr Dudley Ward, at Lonsdale Chambers, 27, Chancery lane, London, W C The objects of the association are as follows —

(1) To circulate amongst ratepayers, county councillors members of boards of works, road surveyors, and others having control of, or employed in connexion with, roads information upon all matters concerning the construction, maintenance, and repair of roads, and to issue such papers, books, and other literary undertakings as may seem conducive to these objects, (2) To confer with councils and vestries, gas, water, and electric companies and other public bodies in regard to all matters affecting the construction, maintaining, breaking open, observing, watering, and repair of roads, (3) to promote improvements in the laws regulating roads, (4) to engage and pay for professional advice, remonstrate with authorities who allow roads to suffer from want of repair or neglect, and if necessary take legal action to enforce the rights of the public and ratepayers, (5) to oppose and resist any proceedings calculated to deprive the public of any rights over such roads In addition to road maintenance the association also takes up the question of finger posts and milestones, without which no road can be considered perfect.

Medical men as members of the public are interested in the maintenance of good roads, for good roads are cheaper than bad ones as well as being vastly pleasanter to travel upon.

[4] THE LANCET March 12th, 1898, p. 749.
[5] The Practitioner vol xlii. 1889, p. 418.

nt in two obvious directions the condition of roads is of particular importance to our profession First, a badly made and badly kept road is one which knows no medium between the conditions of slushy swamp and sandy desert, and roads which are permanently damp or the origin of filthy dust are a source of, or an aggravation to, many pathological conditions Secondly, and in a more exclusive way, the condition of the highways concerns the medical practitioner nearly, for whether he makes his rounds in dog cart or on cycle his work is immeasurably lightened to him if the roads by which he has to travel by all lights and in all weathers are good and properly maintained

THE PROFESSOR OF PHYSIOLOGY IN EDINBURGH UNIVERSITY

PROFESSOR EDWARD ALBERT SCHÄFER has been unanimously elected to fill the vacancy in the chair of Physiology at Edinburgh University caused by the death of the late Professor Rutherford and the choice of the electors will be received with complete approval by all It is not belittling in any way the strong claims, local and scientific, of the other candidates to say that they need not feel personally aggrieved at giving way to Professor Schäfer, for the reputation of the new Professor at Edinburgh University stands second to none in the kingdom Professor Schäfer, though still on the sunny side of 50, has been for 21 years a Fellow of the Royal Society and for 16 years Jodrell Professor of Physiology in University College, London, in which chair he succeeded his chief, Professor Burdon Sanderson He is general secretary of the British Association and the author of the histological and embryological sections in all the later editions of 'Quain's Anatomy" Professor Schäfer's election to this important Scottish professorship is a distinct honour to English physiology, the branch of science which the Queen this year has delighted to honour

THE SUPPLY OF GLYCERINATED CALF-LYMPH

A POSSIBLE danger arising out of the introduction of glycerinated-vaccine lymph into general use is that the demand may become so great that those who have to keep up a supply somewhat in excess of that which they can comfortably or conveniently manage may be tempted to send out material which under ordinary circumstances they would consider unreliable There can be little doubt that the process of glycerination if properly carried out and with the adoption of recognised precautions exerts a most marked influence in destroying all but the most resistant organisms, so that the definitely pathogenetic organisms which can make their way into such lymph are destroyed, those that persist being mainly saprophytic in character and of comparatively little importance from the point of view of the production of disease It has been found however, that such glycerinated lymph, although it appears to degenerate little in activity at first, at a somewhat later stage is apt to lose some of its specific properties All lymphs do not "go off" in the same way, some remaining apparently fully active for months, whilst others lose their specific properties in the course of five or six weeks It is evident, therefore, that the lymph must be used in the interval between the time at which the glycerine has done its work in destroying the organisms and that at which marked deterioration of the vaccine matter is brought about This is a matter of such great importance and one which affects the whole question of vaccination so vitally that the very existence of these glycerinated vaccine establishments depends upon their sending out reliable material Should they once lose the confidence of medical men and of the public they cannot hope to regain it, and anyone who sends out vaccine lymph which is not efficient is damaging not only himself but vaccination Accidents are, of course, unavoidable, but they should be reduced to a minimum and should always be on the safe side—that is, it is better that the vaccine should be slightly deteriorated rather than that undesirable micro-organisms should be present, but the conditions of preparation are now so well understood that even the accident of insufficient activity of the lymph should seldom occur We make these remarks both in the interests of the public and of those who provide glycerinated lymph, as it is absolutely necessary that continual watchfulness and care should be exerted in order that any falling off in the quality of the lymph supply may be avoided If skill and care were not required anyone could supply vaccine lymph, but as skill and care are required those who are interested in the production of this material should make every effort to carry on the work which they have undertaken properly and efficiently We understand, by the way, that Dr Copeman has quite recently devised a method of getting rid of the glycerine when it has done its work, thus avoiding its continued action on the specific microbe The details will soon be made public

PENTASTOMA CONSTRICTUM

RECORDED cases of this parasite are very few, and consequently the paper which we publish by Dr A J Chalmers, assistant colonial surgeon at the Gold Coast Colony, is of exceptional interest The parasite was termed "pentastoma constricta" by von Siebold in 1852, "linguatula constricta" by Küchenmeister and R Blanchard (1888), and "nematoideum hominis" by Pruner and Diesing Dr Chalmers states that nothing is known at present as to its life history or as to the means by which it enters the body, but he believes that it enters by some means into the alimentary canal or that from there it proceeds to the liver, the cysts in which appear to be dilated biliary ducts, and into the peritoneum According to other authors, however, the parasite is only known in the larval condition It has been found in negroes and curiously enough in the giraffe In what form Dr Chalmers considers it to exist he does not say but states that he intends to describe its anatomy at another time The account of the necropsy on his patient is certainly interesting Numbers of parasites were observed moving freely in the abdominal cavity over the surfaces of the various organs and others were found coiled up in the cysts contained in the liver Similar cysts were found in the liver and in each a parasite was found Dr Chalmers's clinical comments are also interesting He thinks that the only possible means of diagnosis during life would be the presence of the parasites in the fæces in cases of wasting and emaciation in negroes, but the disease appears to last some time before causing the death of the patient

CARDIFF INFIRMARY

FOR some reason the Cardiff Infirmary does not receive that support from the inhabitants of the town to which it is entitled and at the monthly meeting of the executive committee held last week such a serious financial condition was disclosed that it was decided to close one or more wards during the next three months in order to lessen the expenditure It was stated that the overdraft at the bank stood at £3 300 and that the only reliable income for the rest of the year amounted to £2 900 Established in the year 1837 there is now accommodation in the infirmary for 180 patients, although owing to the want of funds 30 beds have not been used for several years and it is suggested that another 30 shall be put out of use The annual cost of the institution is about £9000 and last year only about a third of this sum was received in voluntary subscriptions. From invested funds some £1300

yearly are realised It is very apparent that unless an alteration is made on one or the other side of the ledger each year will find the governing body in a worse plight than the last In a town of the size and importance of Cardiff—the self styled Welsh metropolis—there should be very little difficulty in raising considerably more than the amount required to keep the full number of beds in constant use and it is anything but creditable to the townspeople that any curtailment should even be suggested Instead of decreasing the number of beds available they should rather be added to, for even 180 are none too many for the district served, including as it does not only Cardiff borough, but Pontypridd and the Rhondda valleys with the intervening townships—an aggregate population of over 400,000 persons

"THE PRE-PERFORATIVE STAGE OF TYPHOID ULCERATION" CLOSURE OF A PERFORATION BY ADHERENT OMENTUM

THE following case, published in the *Boston Medical and Surgical Journal* by Dr D J M Miller, is interesting as an example of a rare event—recovery from typhoid perforation of the intestine—and in the manner in which this result was brought about The patient was a girl, aged 11 years, and the disease ran a rather severe course On the twenty-third day there were four hæmorrhages from the bowels (about 24 ounces of blood were lost), increased tympanites, abdominal pain and tenderness on deep pressure, and slight rigidity of the recti muscles These symptoms abated, but not entirely, until the twenty sixth day, when the patient complained much of abdominal pain The abdomen was moderately distended and slightly rigid, on deep pressure there was considerable pain which was not localised At 10 A M the temperature had fallen from 103 2° F at 7 A M to 99 4° At 1 P M the temperature rose to 101 4° On the next day the tympanites was marked, the lower border of liver dulness was in the nipple line one and a half inches above the costal margin Pain was continuous and tenderness was great, especially above the umbilicus, there was considerable muscular rigidity The temperature was 102 8°, the pulse was 140, and the respirations were 32 Operation was decided on should the condition not speedily improve On the following morning the child was better, the temperature was 99 6°, the pulse was 95, distension and tenderness were much diminished, and pain was absent Convalescence proceeded On the thirty fifth day a relapse, more severe than the first attack, began On the thirty ninth day (the fifth day of the relapse) seven ounces of blood were passed Seven days later dull and continuous abdominal pain was again complained of On the *next day the tympanites was increased, but the liver dulness* was unchanged Tenderness was very marked, especially at a point just below and to the left of the umbilicus There was decided muscular rigidity Vomiting occurred once The temperature was 103°, the pulse was 134, and the respirations were 56 It was thought that perforation if not present was imminent At 4 P M, three hours later, the temperature had fallen to 99 8°, it rose rapidly to 103 4° at 7 P M Symptoms of perforation and peritonitis—collapse, vomiting and great tympanites and rigidity—rapidly developed Death occurred on the next day at 1 P M At the necropsy considerable gas and fluid were found in the abdominal cavity There were much lymph and many recent adhesions The great omentum was attached to the ileum, serving to close a small aperture in an ulcerated Peyer's patch which had evidently perforated some time before Another perforation was found which permitted the escape of the intestinal contents A similar case has been reported by Buhl[1] A patient died from hæmorrhage on the twenty third day after symptoms of perforation. A piece of omentum was found adherent to and completely closing the opening Cushing[2] has emphasised the frequency of what he terms a "pre perforative stage of ulceration," which he describes as "a localised inflammation of the serosa leading to a slight adhesive peritonitis due to the near approach of an ulcer to the general peritoneal surface." The symptoms, according to Dr Miller, are a gradual rather than sudden onset of continuous pain *which is complained of by the patient himself*, associated with more or less general or localised abdominal tenderness and often with slight muscular rigidity Cushing states that there may be moderate leucocytosis Vomiting and change of temperature are usually absent The case described corroborates Cushing's views There was almost continuous complaint of pain with tenderness on deep pressure and variable but slight rigidity for three days preceding the first perforation and for one and a half days preceding the second Dr Miller remarks that if there is a definite recognisable pre perforative stage operations undertaken then will be more successful than later But it seems to us that those operations would often be unnecessary quite independently of erroneous diagnoses which would be still more likely to be made than in cases with actual symptoms of perforation More value is to be attached to his suggestion that the recognition of this stage would put the practitioner on the alert to enjoin greater quietness and the cessation of bathing, and make him watchful for more pronounced symptoms

"HAY-CORYZA"

THE Professor of Oto rhinology in the University of Turin, Dr Giuseppe Gradenigo, drew attention at a late meeting of the local Academy of Medicine to the increase of hay fever, or, as he prefers to call it, "corizza da fieno"—an increase observable mainly among the well to do classes of Italy The same phenomenon has also been noted and commented on by French physicians among the corresponding class of their compatriots This fact would seem to point to hyper alimentation (or "gout") as a concurrent cause of the malady—if not as its *causa causans* Be that as it may, Professor Gradenigo would define the coryza in question as "a sub-species of the spasmodic, vaso motor coryzæ which recognise two main etiological factors—an irritating agent in the interior of the nose (polypi, 'creste del setto'—excrescences of the septum—and such like) or an agent imported from without (the pollen of certain flowering plants, the dust or detritus of great thoroughfares) coincident with an enhanced susceptibility of the nasal mucosa" The symptoms of the coryza he would classify in the following sequence fits of sneezing, hyper secretion of serum, turgidity and congestion of the nasal mucosa, sometimes of the conjunctivæ and of the tracheal and bronchial mucosæ Passing in review the various remedies in more or less acceptance he finds none of them really efficacious and would counsel "allontanamento" (estrangement) from the irritating agent, bland lotions of the nasal passages "con soluzione fisiologica," alternating with the use of inert fatty substances (these latter of themselves sometimes proving effective), while he would prohibit cauterisations of the mucosa or the repeated use of cocaine The President of the Academy (Dr Edoardo Perroncito, Professor of Parasitology in the University) asked Professor Gradenigo "if, in the exudations of the rhinitis in question he had found the corpuscles of the pollen of plants used for feeding cattle (*piante foraggiere*)" "No positive researches in this direction had yet been made," was the reply, "but, 'till then, the subject cannot

[1] Zeitschrift für Rationelle Medicin 1857 Neue Folge, Band viii. S 12

[2] Johns Hopkins Hospital Bulletin 1898 vol. ix., No. 82, p. 257

be held to have been thoroughly investigated" The memoir of Professor Grademigo, the criticisms to which it was subjected, and the "reply on the whole case" will be found to form an interesting section of the "Atti della Realo Accademia di Medicina di Torino"

STRAWBERRIES AND GOUT

A WRITER in *Nature* speaks of the cruel medical tyranny which banishes the strawberry from the diet of the gouty and quotes what Linnæus had to say about the curative properties of this delightful fruit This great naturalist was persuaded to take strawberries during a severe attack of sciatica with the result that a sweet sleep ensued and when he awoke the pain had sensibly subsided On the next day he ate as many strawberries as possible and on the following morning the pain was gone and he was able to leave his bed Gouty pains returned at the same date in the next year, but they were dispersed as soon as Linnæus was able to get strawberries Although strawberries are forbidden to the gouty by some authorities, by others they are permitted, the fruit being regarded as a useful food for gouty persons on account of its richness in the salts of potash, soda, and lime and its cooling diuretic, and laxative qualities The analysis of the strawberry shows it to be particularly rich in soda salts and in spite of the high percentage of water this fruit excels all other common fruit in the amount of mineral salts The chemistry of the strawberry therefore would teach that this fruit is likely to be beneficial in gouty states

THE ETIOLOGY OF BERI-BERI

WITH reference to an article on the preventive treatment of beri beri by Dr Laurent of the French navy which appeared in the *Archives de Médecine Navale* for March last and to which we referred in an annotation,[1] Dr P Brémaud, who was quoted by Dr Laurent, writes to our French contemporary to say that when he was lecturing on the subject in 1885 his views regarding the prophylactic virtues of fatty food in beri beri were by no means "purely theoretical," being, on the contrary, based upon two remarkable facts which had come to his knowledge while on foreign service in 1877-79 Of these the first was as follows The penitentiary on the island of Pulo Condore, containing upwards of 1000 prisoners, was at that time regarded as a kind of sanitarium, the air—as Dr Brémaud's predecessor observed—being a veritable prophylactic against beri beri Under an unusually intelligent commandant the convicts were employed in various industrial pursuits, as far as possible in the open air, and were also encouraged to keep pigs and poultry and to cultivate private gardens Their diet, too, was carefully supervised, and altogether they were treated more like colonists than convicts This condition of things went on for several years when unfortunately the intelligent commandant was replaced by an official of ordinary calibre under whom Pulo Condore soon lost its Arcadian character The out of door life came to an end and the prisoners rigidly confined within four walls, found themselves condemned to an existence of complete inaction Their food also underwent a change for the worse, consisting for the most part of water cooked rice and a little salt Under these unhygienic circumstances beri beri promptly made its appearance, exacting victims by the hundred. An inquiry soon brought about an alteration of diet with pork as the staple ingredient, and like a charm the epidemic was stayed In this case, although the food was clearly at fault, there was nothing to point to the particular item the absence of which was responsible for producing the disease, but in his second experience Dr Brémaud was able to obtain more exact indications In 1879 he was employed as medical officer in charge of an English vessel called the *Rhone* (*sic*) which had been chartered by the French Government for the purpose of conveying coolies from Pondicherry to Martinique On the voyage, which lasted four months, beri beri showed itself in one group alone out of the many into which the human cargo was divided The contaminated section consisted of Mahomedans exclusively Fearing lest they should become defiled by lard they obtained leave to provide their own food and cook it for themselves in a special part of the ship Their meals were ample, so far as quantity was concerned, consisting of rice salt fish, dried vegetables, and kid flesh, yet they suffered severely The remainder of the coolies consumed grease in one form or another and remained perfectly free from beri beri throughout the voyage, but Dr Brémaud is by no means sure that he has found the cause of the disease Beri beri is probably a specific affection, the deprivation of fatty matters in the food merely producing a condition of body favourable to the development of its active agent should such exist

[1] THE LANCET April 15th, 1899, p. 1045.

THE LIVERPOOL SCHOOL OF TROPICAL DISEASES RESEARCH EXPEDITION TO WEST AFRICA

THE Liverpool School of Tropical Diseases which was formally opened by Lord Lister on April 22nd, 1899, has steadily progressed since its inauguration The special ward at the Royal Southern Hospital set apart for the clinical instruction of the school has been full to overflowing ever since with typical cases of malaria and other tropical diseases The School lately made an offer, which has been accepted, to receive from the Colonial Nursing Association, London, three nurses intended for service in the tropics and to give them a special training at the expense of the Liverpool School The committee have for some time had under their consideration the question of organising and despatching to the West Coast of Africa a special expedition for the purpose of investigating the causes of malaria and other indigenous diseases They have now definitely decided to send out such an expedition and the arrangements which are being made for the purpose will be found in the communication from our Special Correspondent at Liverpool

THE next examination for the Charles Murchison Scholarship in Clinical Medicine, which is open to any student of medicine, qualified or not, who during a period of not less than five or more than seven years has been a registered medical student in attendance at recognised classes or hospitals in Edinburgh or London, will be held in the University of Edinburgh on Friday and Saturday July 7th and 8th, 1899 The scholarship is of the value of 20 guineas and is tenable for one year Intending candidates are required to send in their names, with evidence of their qualification to compete, to Dr Thomas R Fraser, Dean of the Faculty of Medicine, University New Buildings, Edinburgh, not later than July 1st

THE next dinner of the Glasgow University Club in London will be held at the Trocadero Restaurant on Friday, June 30th, at 7 o'clock P M Lord Kelvin has promised to preside and the special guest of the evening will be Sir William Gairdner, K.C B M D Edin The honorary secretaries of the dinner are Dr Norman M Maclehose, 13, Queen Anne-street, W, and Mr James M Dodds Dover House, Whitehall, S W, to whom application should be made by those wishing to attend

THE annual general meeting of the Brussels Medical Graduates' Association will take place at the Café Royal,

Regent-street, W, on Wednesday, July 5th, at 6 30 P M At 7 15 for 7 30 the members and their friends will dine together Brussels medical graduates wishing to be present at the dinner are requested to communicate with the honorary secretary, Dr Major Greenwood, 243, Hackney road, N E

THE new buildings which have recently been completed at the London Hospital Medical College will be opened on July 18th by Lord Knutsford The opening ceremony will be followed by the distribution of prizes to the students and nursing probationers in the Library of the Medical College by Lord and Lady Knutsford

ON the occasion of the distribution of prizes to the successful students at Guy's Hospital by Mr Robert Gordon, on Friday, July 7th, a garden party will be given by the governors and staff, and the new laboratories, wards, and museums of the hospital will be open for the inspection of the guests

SIR HENRY THOMPSON, Bart, has been nominated an Honorary President of the Thirteenth International Congress of Medicine to be held in Paris in August, 1900

THE PROPOSED REGISTRATION OF MIDWIVES

ON June 15th, at the West Ham Hospital, Stratford, E, in reply to the resolution—

That the Wood Green and District Medical Society and the East Suburban Medical Protection and Medico-Ethical Society Limited view with regret the fact that Mr Victor Horsley has ceased to carry on his opposition to the recognition at law of partially qualified practitioners in that he is at present supporting a Bill giving a legal status to midwives and trust that he will reconsider his position—

Mr VICTOR HORSLEY said It is with the greatest pleasure that I come here this afternoon to enter into this discussion on such an extremely important subject Mr R F Tomlin in his remarks has divided the matter into two heads—(1) the question of the registration of midwives as midwives, and (2) the question of the giving of certificates by such bodies as the Spectaclemakers' Company and opticians At first I understood the resolution passed by you at your respective general meetings to refer to the Bill at present before the House of Commons which is put forward by the supporters of the Midwives Institute and is backed by a certain number of influential Members of Parliament If you passed your resolution under the impression that I was giving my support to the Bill now before the House you have been placed in a false position, I am as much opposed to that Bill as any of us, and under those circumstances I wrote to the secretary of the Wood Green District Medical Society to say so If, however, the Bill which was referred to in Mr Tomlin's resolution is the Bill which has been furnished by the British Medical Association I think then that the resolution of your society distinctly applies to me, and I shall therefore assume that the only Bill referred to is that of the British Medical Association What, then, is the position of affairs and what is my position towards you as your Direct Representative? The position of affairs is this Years ago a Bill was framed by the British Medical Association for the purpose of registering midwives to secure that they should be properly educated in the carrying out of their work Of course, midwives have always existed and with midwives as such no one has ever attempted to interfere, but circumstances arose which made it necessary for their being put on a list for the purpose of controlling their practice, so we see that what there is of novelty in this question has arisen with the earliest attempts made by the British Medical Association years ago to control the practice of these women and not to give them practice I repeat the idea of this Bill was to control their practice and not as has often been assumed by, many, to confer anything in the way of additional practice upon them That Bill dropped and for some years nothing further was heard of the matter Then arose a kind of nurses' club—also called the Midwives' Institute—and the members of this club took upon themselves to raise the matter up afresh by introducing a Bill into the House brought forward by Lord Balfour of Burleigh and then began the acute phase of the question, since that Bill of Lord Balfour's was a far more objectionable one in many ways than the Bill now brought forward in the House of Commons by Mr J Balfour The matter was further advanced—long before I became your Direct Representative—by the General Medical Council who practically accepted Lord Balfour's Bill with the introduction of a few verbal corrections We need concern ourselves, however, no more with that Bill—it dropped and was replaced by that of Mr Egerton of Tatton, which was practically the outcome of the committee of the House, which reported in favour of some kind of registration being adopted by the Government This Bill has also disappeared and we are now face to face with Mr J Balfour's Mr Egerton's was before the General Medical Council when I stood in 1897 for your suffrages, and reference has been made by Mr R F Tomlin to a letter which I wrote to Mr Jackson and the substance of which I maintain now as then I strongly object to the giving of a legal status to persons to practise midwifery, but I think that when this resolution was laid before you those who are interested in this subject forgot a document which I had circulated before being elected and when I was a candidate I should like to read that document to you, though you have all had it before, but it probably shared long since the fate of all circulars and such documents

THE GENERAL MEDICAL COUNCIL.

BYE ELECTION 1897

To the Registered Practitioners of England and Wales

LADIES AND GENTLEMEN —As I find that considerable misconception and confusion prevails concerning the so-called midwives question" I beg to lay before you the following facts:—

1 Persons called midwives are at the present time and in considerable number carrying on midwifery nursing, and irregular midwifery practice.

2 In recent years but especially since 1889 when Sir Walter Foster brought forward and carried in the General Medical Council a motion urging the Government to construct and pass a law for the registration of midwives a popular agitation has been carried on to effect this and to confer upon them what is practically a professional title and status.

3. There is also a widespread and obviously just feeling that the calamities which are caused at present by ignorant midwives cannot be allowed to continue and the registration of the title midwife or midwifery nurse has been erroneously supposed by the General Medical Council to safeguard the interests of the public.

4 To procure safety for the public it is clear that the so-called midwives must be taught midwifery nursing and that any person who follows the calling of a midwifery nurse without having had such teaching must be punished by statute.

5 No legislative guarantee of this kind however is possible unless the names of properly taught midwifery nurses are placed on a list or register

6. To meet the requirements of the public as laid down in the report of the Select Committee of the House of Commons, 1893, it is evident that the Privy Council will at no very distant date introduce a Bill which to judge from the two (Lord Balfour's and Mr Egerton's) already sent to the General Medical Council for consideration and report as soon as possible" (*vide* Minutes G M C 1897) will probably contain no safeguard either to the medical profession or the public.

7 The case of the medical profession has been gravely prejudiced by the practical adoption by a committee of the General Medical Council (of which Sir Walter Foster was a member) and subsequently by the Council of the former of these Bills and by its amendment in various unimportant particulars without provision of a single safeguard against the establishment and quasi legislation of a body of unqualified practitioners in midwifery such as the existing midwives.

8. The General Medical Council has now appointed a committee to consider Mr Egerton's Bill the question is therefore practically reopened.

9. The Parliamentary Bills Committee of the British Medical Association, through a sub-committee of which I was chairman has prepared a Bill for the teaching and regulation of obstetric nurses which is now before the Council of the Association for consideration

10. The point of immediate importance to the profession in this question at the present time is the strict preservation of the triple qualification in medicine, surgery and midwifery alone possessed by registered medical practitioners.

11 There are two methods of securing this of which the first is the proposition by the Lancashire and Cheshire Branch of the British Medical Association —namely That every case of midwifery attended by a midwife should be seen by a registered medical practitioner within 24 hours of the commencement of labour" This I believe would adequately meet the case

12. The second however is more fundamental in principle and is what I should endeavour to secure acceptance by the General Medical Council and reference to the Privy Council as being a complete legislative safeguard against the attempted contravention of the Medical Acts. I propose that when any report on a *Midwifery Nurses* Bill is brought forward for final adoption there shall be first adopted a Bill for the amendment of the Medical Acts to prevent the practice for gain of medicine, surgery and midwifery by any but practitioners registered under the Medical Acts.

13. This safeguard will at the same time put a stop to the irregular practice in diseases of women and children carried on at the present time by midwives certificated or otherwise, and chemists.

I am, yours *faithfully*

VICTOR HORSLEY

You all had this document Some of you may have voted for me, some against me, but at any rate you knew perfectly well before you elected me my ideas on this subject, and these ideas remain the same I will now tell you what has happened since 1897 and fill up the blanks in this document for you to see where we are now The fact remains, of course, that the Government is at present being pressed hard by people who have this to be said for them that there is a great amount of evil inflicted by untrained midwives, there is no gainsaying that the Government takes up a point like that and says that this is a popular point which must be dealt with Since I wrote this in 1897 I will remind you that a President of the Privy Council whom we are about to lose from office—the Duke of Devonshire—said distinctly that he would refer this matter to the profession and that the promoters of this Bill must make their terms with the profession I am sorry to say that the Duke of Devonshire s idea of the profession is the General Medical Council—a very gruesome thing, but it is a fact—and in accordance with this view the President sent Mr J Balfour's Bill to the General Medical Council for their opinion That Bill was referred to a committee of which I was appointed a member and I may say at once that that committee provided all safeguards which we have thought necessary both for the interest of the profession and of the public, with the exception of course of my last safeguard—namely, a Medical Acts Amendment Bill The General Medical Council accepted our report and with only one modification, which was the question of the composition of the Midwives Board that was to regulate the whole business We carried in that committee that every member of that Board should be a medical man, but when brought before the Council that portion of the clause was thrown out again and the point was put in that the Lord President might appoint a layman or a laylady Well, we lost that, and it is no good saying anything more on that point What were the safeguards which we thought necessary? The safeguards with reference to the public—for this is a public matter, as the safety of the public is as much at stake as the interests of the medical profession—in the Bill now before the House are practically *nil* It does not safeguard the interest of the public in the least The Bill simply confers—what shall we say? I am sure I do not know what it really does confer—the term 'midwife" upon certain people who are on the register of midwives—a very empty gift even to the midwives The present Bill up to a short time ago only conferred that title upon people as soon as they were put on the list of midwives Lately, however, its promoters have adopted the main safeguard to the public which the British Medical Association thought to be necessary—namely, that no person should ' habitually and for gain" attend women in normal labour Of course, until you have absolute arrest of the practice of persons who are not on the list you have no protection to the public whatever Now these people who are promoting the present Bill have accepted that safeguard recently with a bad grace and I must say here that unless our representatives in the House are really watchful of the interests of the profession and the public we shall find that that safeguard is dropped if there is any opposition to it That is the first point, and now as to the safeguards of the interests of the profession Here I am right in saying that there is absolutely none in the Bill at present before the House, but during the last session of the General Medical Council some correspondence ensued between the Council and the Duke of Devonshire which arose in this way At the May session of the General Medical Council in 1898 a resolution to the effect that those women who are put on such a list should be restricted to the watching of persons in normal labour (I am quite aware of Mr Tomlin s remarks on the difficulty of saying what constitutes normal labour) was proposed Mr Balfour and his friends did not accept this at first, but we find now that under pressure from the Duke of Devonshire they are going to accept it and under his advice it has been inserted in Clause A That is the chief safeguard to the profession The question of normal or abnormal labour was raised very keenly by Dr Rentoul and others at the very commencement of the agitation against any registration of midwives at all Of course all points should be raised and I think it is a most important one in this sense, that it must come in the statute that persons who can be proved to be practising midwifery in relation to abnormal labour should be brought within the Act and punished, but as to difficulties, I can see none at all in the matter as regards the determination of what is normal or abnormal labour

It is obvious that any labour in which an accident happens at once becomes an abnormal labour, and if the midwife continues to accept the responsibility and care of that case she comes under the punitive clauses of the Bill What is the safeguard to the public in that, it may be said? Postpartum hæmorrhage, for instance, may kill the patient while the practitioner is being sent for Of course, but that is not our affair If the public choose to run the risk of killing themselves or being killed it is their look out I think there is a great misconception on this question of normal labour The public think that in the most serious cases of disease they are quite entitled in calling in a quack doctor and their idea that there should be no restriction up to the point of accident is only in keeping with the general truth that the public are great fools But, after all, we do not make the laws for the public, they make the laws for us unfortunately and, as a matter of fact, if you can show that it involves danger to the public but not to us and if we put in a punitive clause of the kind proposed we then have washed our hands of the affair and there is no responsibility attaching to us at all Mr Tomlin raised in connexion with that point a most important detail and it is this suppose an accident happens in parturition, as well it may happen, and suppose the midwife, in accordance with the Bill, calls in a practitioner, will not that practitioner be answerable for "covering"?

Until such a case happens and is brought before the Council it is wrong for me to express any opinion except as an individual, and you must understand that I speak as an individual and I cannot answer for the opinion of the Council It seems to me that if the woman has fulfilled the restriction laid on her by the proposed statute no charge of covering is likely to be brought against the practitioner, there are a great many correlative circumstances always, and of course I am only speaking of a direct complaint on which it seems to me impossible that any charge could stand if the statute passed into law Now we come to several other points in connexion with midwifery registration in general In the first place, in relation to the question of these women in their registration as midwives and not as midwifery nurses, as we wish Well, you may say there is nothing in a name, I think there is and I fought as hard as I could for the term "midwifery nurse," but this and "obstetrical nurse" and other such terms have been voted out by sheer voting till we get down to "midwife" Hence we must accept that position, if we brought it up again it would be scarcely in order There is, however, one more chance in connexion with that point—namely, the House of Commons I think it a very poor chance I have spoken to numberless Members of Parliament, endeavouring to enlist them in the attitude taken by many of the profession (I say many statistics showed three years ago that the profession was practically equally divided into two parties on this question), and I am sorry to say on the question of title I obtained no sympathy from anyone Their answer was invariably, "Midwife is the term in general use" Passing to another point, it is quite a mistake to think that any of these proposed Bills give to any women the right to "practise midwifery" Our triple qualification is not invaded in that respect It restricts these women to the right to go to a person in normal labour alone Another point I would direct your attention to is this—that if anyone was to attempt to prosecute a midwife under the Medical Acts there would be no chance of success I would appeal, therefore to common sense How does the British Medical Association Bill, which restricts their practice, put them in a better position than they are and attack the triple qualification? The validity of the latter is not affected The certificate of the London Obstetrical Society, on the other hand, is a monstrous thing, in plain language, it is a diploma. Mr Brown and I endeavoured to deal with this in connexion with the spectacle makers business but we were out-voted Mr Tomlin said that midwives are not required On that point he must go and talk to the people who employ midwives He also says that the Bill of the British Medical Association is a farce and he regrets that the Council of the British Medical Association approved of it at all I do not regret that because I think that this is the best Bill which has been drafted—the best of a bad lot He went a little farther to say it would be a good thing if the Council of the British Medical Association would bring itself more into harmony with the wishes of the practitioner, with that I sympathise

You have the law entirely in your own hand, but you will not exercise it You have the right to choose men who shall go to that Council and it is your business to see that such men do go I may say at once in passing that I understand that the Medical Acts Amendment Bill which the Parliamentary Bills Committee framed and sent up to the Council has met with bad fortune The first point in it was the insistence that the representation of the corporate bodies on the General Medical Council should be a true electoral one That Bill has been emasculated by the council of the British Medical Association I therefore do not approve of its views any more than does Mr Tomlin All I have to say is this, What policy are we going to adopt in connexion with the matter? Mr Tomlin says, oppose the Bill *in toto* tooth and nail and it will never pass From my point of view it is impossible to stop the Government when they are interested in a matter from forcing a Bill through the House, and if they are bent on such a thing the only thing to do is to secure as far as possible that that Bill shall be modified in accordance with the wishes of the profession My conversation with Members in the House has shown me that Members only care for votes, that the medical profession only form a small fragment of the community and are easily out voted by the mass of the electorate The Members of the House do not care what we say to them respecting any interference with their future re election The second point is, How are you going to raise popular opposition to this Bill? What has been the effect in the past? The only effect on the Government that has ever been brought about was obtained through one or two bodies, such as the British Medical Association or the General Medical Council Put the General Medical Council out of court at once, for they have done what they think fit You can only do it through the British Medical Association Council or through motions passed in the branches of the Association You have already settled this matter by your branch Your branch three years ago sent up answers on this subject and surrendered their responsibility in the matter The Council have crystallised those answers in the form of the Bill before you How, therefore, can you move the Association to take up any other attitude on this question? Mr Tomlin thinks it is possible, I do not Dead opposition to all legislation is an impossibility—it is a policy that will not work, and under those circumstances I think this proposition of dead opposition is absurd The chairman, Dr F J Smith, has placed in my hands a letter from Dr Glover in which he says that he thinks modification of the Bill a more practicable policy than one of blank opposition to all legislation I have spoken entirely for myself in this matter Now comes the question, What have I done in regard to these Bills? I have endeavoured to obstruct all Bills which contain fundamental errors, so far we have succeeded in postponing Bill after Bill until we have got Mr Balfour's which in its latest form will include safeguards in the interests of the public and of the profession provided they are not dropped out as the Bill goes through the House The position of the Government is evident, as anybody can see who reads the minutes of the General Medical Council The President of the Privy Council only wants to get a measure which shall be a kind of compromise between the promoters of Mr Balfour's Bill and the profession and to put that before the House as a Bill. Everything goes to prove this and that the Government intend to bring in a Bill which, if they choose to back, they can force through irrespective of our wishes in the matter Therefore, the proper thing to be done now in this question is to press the British Medical Association Council to urge upon the Government the adoption of their Bill which does include everything we want, on the assumption that *some* legislation will be carried out and that that legislation ought to be modified to our requirements—that is the position I advocate at present, gentlemen, and it seems to me to be a perfectly practicable one

I now come to the question of certificates of spectacle-makers and obstetrical societies In spite of statements by Mr Carter this question is a new one—new in this sense that we have a medical practitioner capable of holding an examination of a character which though it may only deal with refraction is undoubtedly a professional examination On that point you have your answer from the General Medical Council, it was that they are ready to consider such conduct of a medical practitioner as possibly coming within the scope of Section 29 of the Act, but they cannot take up the matter themselves and they leave it to you to take action As far as you are concerned with the question of certificates in general all of them are poisonous and none perhaps more so than the London Obstetrical Society What is the position of the Council in this matter? It is one of complete stultification The Council first declared that the original London Obstetrical Society diploma was a document which ought not to be issued by any practitioner under pain of his conduct being considered infamous The late President, Sir Richard Quain, held communication with the London Obstetrical Society who altered the wording of their diploma slightly, and the General Medical Council accepted it The memorial recently presented to the General Medical Council, if shorter and couched in more business like language, would have obtained more support The matter was brought up again to the Council on the Executive Committee and Mr Brown and I urged that a special committee should consider the facts raised by the memorials Again we were out-voted by the usual phalanx of reactionaries led by Mr Carter We shall bring the matter up again, but of course as the Council does practically no work between the sessions six months is lost Finally, with respect to the safeguards I consider necessary to all midwifery legislation, the most important, as I said in 1897 when candidate for your votes, is the Amendment of the Medical Acts To secure this I intended to make a resolution at the General Medical Council but was glad to find that Dr Glover had already put on the programme a notice of motion to appoint a committee to draft proposals for such a Bill This motion was out-voted by Mr Carter and his friends, but we now have them on the horns of a really picturesque dilemma. Some years ago they declined to listen to the British Medical Association It was, to speak in the sense of Dr MacAlister's words, an outside with which the General Medical Council had little concern Now last week the same opponents reasoned that it was better that an outside body should do the work We must therefore see that the British Medical Association actively pushes forward this most fundamental reform

THE ROYAL SOCIETY (SECOND) ANNUAL CONVERSAZIONE

As is invariably the rule the second annual conversazione of the Royal Society—an event generally known as "Ladies' night"—proved much more attractive from the point of view of display than the previous event in May Indeed, the exhibition held last Wednesday (June 21st) comprised the same subjects of demonstration as before, but with some interesting and pretty additions which served to relieve the *tout ensemble* from that severity of aspect which characterised the first display

Electricity appeared to be the favourite subject. In this connexion, appropriately enough, there was a lady exhibitor in the person of Mrs. Ayrton who presented to view a very attractive series of experiments illustrating the hissing of the electric arc This noise appears to be due to the burning of the carbon in contact with air instead of volatilising On account of an increase in current the carbon vapour no longer protects the carbon pole and so it commences to burn with characteristic sound In the absence of air, as in a vacuum, hissing is not produced nor is it when the poles are surrounded by an inert gas On the other hand, when oxygen is directed upon the arc light hissing is soon established even with a small current Mr Mackenzie Davidson showed a very ingenious apparatus enabling the Roentgen ray shadows upon a fluorescent screen to be seen in stereoscopic relief By this apparatus a foreign body may be very correctly and quickly located The new interrupter known as the Wehnelt interrupter has been improved and some remarkable effects produced by this apparatus were shown by Mr Swan, F R S, and Mr A A Campbell Swinton Mr Shenstone was busy in showing the making of tubes from rock crystal in the oxyhydrogen blowpipe flame Glass made in this way promises to become of great value for experimental purposes since it is electrical and permeable by the x rays Mr Boys, F R S interested the visitors with a very simple apparatus producing a diffraction colour photograph This photograph is made by successfully printing on an albumen plate three photographs which had been taken through red, green, and

blue glasses respectively, and upon the plate also are printed "grating rulings" of pitches corresponding to the wave lengths of these colours The result is very beautiful, the most striking subject shown being a large stained glass east window This demonstration was undertaken for Mr Wood of the University of Wisconsin Mr Saville Kent, F.R S , exhibited a beautiful collection of natural colour photographs of zoological and botanical subjects Mr J E Petavel proposes to re establish platinum as a standard of light The apparatus was in full working order, the standard adopted being the light emitted by platinum just as it is about to solidify The chief exhibitions on the table in the middle of the principal library were microscopic specimens. Among these Dr Patrick Manson's exhibit showing the development of the malarial parasite attracted considerable interest. Close by was an admirable collection of mosquitoes recently received at the Natural History Museum for study in reference to the connexion of malaria with mosquitoes This exhibit was presided over by Professor Ray Lankester F R S Much of the space on the same table was devoted to the exhibition of cultures (and microscopic specimens of certain pathogenic bacteria by Dr Macfadyen for the Jenner Institute of Preventive Medicine A corner, however, was assigned to Dr Gladstone who showed some interesting ancient metals from Egypt, Babylon, and Britain Amongst these was powdered galena from Glastonbury which was used for blackening eyebrows There were many other objects of interest which have already been described in a previous article in THE LANCET of May 6th, 1899 on the occasion of the first conversazione

The lantern demonstrations in the meeting room included some photographs of the eruption of Vesuvius in 1898 taken by Dr. Tempest Anderson , some beautiful phenomena of phosphorescence shown by Mr Herbert Jackson , and some views of the Bolivian Andes taken by that well known explorer Sir Martin Conway The scene was a brilliant one, and a very large number of distinguished visitors were present

THE ARTICLE CLUB INDUSTRIAL EXHIBITION

ON Saturday, afternoon, June 17th, the members of the Article Club held an exhibition in the south nave of the Crystal Palace The Article Club is a club composed of commercial men whose object is to form a combination of the world's foremost industries—a somewhat ambitious programme, by the way, but one which the promoters take most practical steps to carry out We refer here only to such of the exhibits as were of interest to medical men, but speaking generally we may say that the club managed to get together a very interesting and representative commercial show

Messrs J and J Colman, Ltd , at their stall, distinguished by a model of Carrow Works, their factory at Norwich, showed some new sinapisms consisting of mustard spread on a light pliable fabric between two canvasses Their concentrated mustard oil a greenish oleaginous product expressed from the seeds, is of a specially refined character Messrs W J Bush and Co , Ltd , of Artillery lane, London, had a good show of essential oils and essences of all sorts. Messrs Fassett and Johnson, of 31 and 32, Snow hill, E C , showed their mustard plasters on paper and cloth, which must be dipped in tepid water , if water of a higher temperature is used the ferment myrosin, which acts upon the glucosides producing the volatile oils, is coagulated and so rendered incapable of entering into reaction Sulphur candles in different sizes, to which reference has already been made in our columns, were shown , they are much used for disinfection of rooms by sulphurous acid gas Their belladonna plasters, containing the pharmacopœial alkaloidal strength (0 5 per cent.), are excellently protected by linen on each side Mention may also be made of their aseptic ligatures carbolated gauze and cotton and rubber adhesive plaster (Mead s) Mr W H Stanley, of 13, Railway approach London bridge, S E , exhibited a stock of optical instruments of delicate workmanship, and on view were the pebble cutting and working and frame making for the spectacles performed by skilled workmen. Mr Stanley also showed some glasses with rigid frame (so as not to fold) which fit the nose by light spring plaquets applying themselves with soft pressure The india-rubber goods of Messrs J E Hopkinson and Co , Ltd , of West Drayton, Middlesex, were well worth inspection The Thornton Scarth Syndicate, Ltd , of Birmingham, represented the Acetylene Lighting Industry Pinley Small pox Hospital (near Coventry) is lighted by this gas. We were informed by the firm that they are about to put on the market a portable apparatus for laryngoscopic work which may be carried in the waistcoat pocket Mellin's Food, Limited, had a prettily arranged stall of their foods and emulsions The exhibit of the Bovril Co , of 30 Farringdon street, E C , contained a great variety of preparations, including stamnoids, Malto-Carnis, meat juice, marrol, and virol, which we have already noticed At the stall of Dr Jaeger's Sanitary Woollen System Co of 95 Milton street, London, E C , the Nottingham Circular frame was in motion, illustrating the weaving of pure undyed woollen material for the Jaeger underwear A very fine woollen material "taffeta" seems specially well adapted for summer wear and for the colonies Messrs Defries and Sons, of 147, Houndsditch, London, E C , showed the Pasteur Filter and Equifex disinfection appliances The Saturated Steam Disinfector under pressure, with automatic recording gauge indicating temperature obtained in each operation and its duration as adopted in Netley Hospital, &c , was a prominent feature in the exhibit Messrs Newton, Chambers, and Co , Ltd , of 331, Gray's Inn road, W.C , exhibited numerous preparations of the non poisonous disinfectant "Izal"—emulsion, soap, ointment, tooth powder, &c The value of Izal was pointed out in a paper in THE LANCET of July 1st, 1893 Izal lint and gauze were also shown and preparations of Izal oil called perles, used for intestinal antisepsis

Other stalls of interest were those of the Patent Borax Co , of 129, Holborn, Messrs Hall Matthew and Co , sanitary engineers, of 88, Wigmore street, W , and Messrs R and A Main, gas cooking and heating engineers, of Kinning Park, Glasgow At the stall of the Messrs Siemens, electrical engineers, was a telegraph instrument, one of 12 which were sent out to Khartoum in 1878 by the firm to the order of the late General Gordon (the order as written by General Gordon was shown) The instrument was found after the battle of Omdurman in a hut in working condition

In the absence of Lord Suffield, President of the club, the chair was taken by Mr Laurence Cowen, the honorary secretary at the luncheon, which was served in the club s dining room About 200 persons were present, including Sir Chih Chen Lo Fenglub, Chinese Minister Plenipotentiary Lord Donoughmore, Sir Horace Tozer, K C M G , Agent General for Queensland, and others, His Excellency the Chinese Minister addressed the company and in the course of a few remarks said that he looked upon the English press as a great instrument for good, that he was a great admirer of our literature and had read many of our philosophical, poetical, and scientific works, and that he was having Lord Charles Beresford's work on China translated for use in his own country In his opinion it was one of his most important duties to bring to the knowledge of his fellow countrymen what had been and what was being done in this country He took the opportunity of indicating not only the friendly feeling he bore towards this country but his sense of the importance of bringing the manufacturers of the British Empire into closer commercial touch with the 400,000,000 inhabitants of the empire which he represented —His Excellency proposes to make a tour of the manufacturing districts in Great Britain, and according to a leading article in this week's issue of *Commerce* it is his intention further to return the compliment paid by Lord Charles Beresford to China by writing a book which shall record his impressions of Industrial Britain and which is intended to be an official report on the manufacturing resources of this country to his Government

ISOLATION HOSPITAL FOR BRISTOL —The new isolation hospital at Ham Green is to be opened for the reception of patients on July 17th The hospital and grounds cover about 20 acres of land and will provide accommodation for 185 patients The buildings at present erected consist of four pavilions and an isolation ward which will accommodate 76 cases The cost has been estimated at about £30,000.

Obituary.

LAWSON TAIT, F R C S ENG & EDIN

THE unexpected death of Mr Lawson Tait has created a widespread feeling of regret and has removed from the domain of surgery a light which has shone with singular force and brilliancy for a number of years Mr Tait was present at the opening of the new railway station at Droitwich on June 3rd, and at the subsequent luncheon, in response to a call for his name when the toast of "The Visitors" was proposed, he rose and spoke the following words "I came to Droitwich last night, I was quite well, I had a bath and to-day I am better" Amid laughter he resumed his seat with evidently little presage of what was so soon to come On June 13th he was seized with pain and serious symptoms connected with the kidneys, and died at three o'clock in the afternoon The renal disease was of some duration, for two years ago a calculus became impacted in his urethra This was removed by a surgical colleague, but his health had been indifferent since, and no doubt the disease which ultimately caused his death was progressing in the interval

Lawson Tait was born in Edinburgh in 1845 and was consequently only in his fifty fifth year at the time of his death Educated at Heriot's Hospital School in that city he subsequently became a student in medicine at the University and Extra mural School and qualified as L R C S Edin in 1866, becoming a Fellow of the Royal College of Surgeons of Edinburgh, in 1870 and of the Royal College of Surgeons of England in 1871 It was during his student days when associated closely with Mr Alex McKenzie Edwards, a rapid and brilliant operating surgeon, and afterwards with Sir James Simpson, that he imbibed and fostered that enthusiasm for surgery which led him to what may fairly be termed world wide renown After three years at Wakefield, where he was house surgeon to the hospital, he went to Birmingham in 1870, taking a house in the suburbs He soon afterwards removed to the centre of the town and by his indomitable energy and persistence, as well as by early association with influential fellow residents, became a prominent citizen and a rapidly rising surgeon It was about this time that the opportunity was given to his powers by the establishment of the Hospital for Women The project met with considerable opposition within the ranks of the medical profession, but the great mortality which some 30 years ago attended abdominal operations proved a strong argument with the public for the advisability of supporting a special hospital where, it was urged, special care could be given to such cases Throwing himself with characteristic vigour into the movement all opposition was borne down and Tait was appointed one of the first surgeons to the hospital It was at this date that he became a Fellow of the Royal College of Surgeons of England In the Hospital for Women and in his own private hospital in the Crescent at Birmingham he soon obtained a large practice in abdominal operations devising surgical methods which have gone far to revolutionise the treatment of the special diseases of women throughout the world In 1873 he published his first work on Diseases of the Ovaries for which the Hastings Gold Medal was awarded His method of performing ovariotomy operations without the clamp (until Tait's time almost universally employed) was attended with exceptional success In the removal of diseased Fallopian tubes and pelvic abscesses he enunciated new views of pathology which have since received general acceptance, and with the investigation of ectopic gestations his name has been honourably connected as a great pioneer and original worker In perineal operations he simplified and practised a ready method of repairing the tissues which has been generally followed, and by numerous and almost incessant contributions to the surgery of the female pelvic organs he advocated and emphasised operative modifications founded upon the outcome of an exceptional and versatile power of intuition Nor was his genius confined to the sphere of gynæcology alone, for he operated in other directions, notably for the removal of gall stones, with original design and ability Tait was, indeed, a rapid and brilliant operator, quick in judgment, fertile in resources, and apt in dealing with difficulties Not giving so much profound attention to diagnosis, which he knew and felt was often problematical, he solved the question in abdominal operations by his insight into the pathological conditions present and by bold and often daring procedure he met with results which signalised his skill and power of overcoming difficulties and complications Self confident and capable, he was always aware that his strength was exhibited in the face of danger, and he inspired the feeling in those with whom he was associated that fear was unknown to him and that nothing was ever done by him in response to so unreasonable a sentiment

Lawson Tait was appointed first Professor of Gynæcology at Mason University College and afterwards bailiff and trustee of that institution, where he always espoused the cause of medical education with foresight and effect In 1890 his surgical position was recognised by the British Medical Association, before which body he was chosen to deliver the address in surgery at the annual meeting held in Birmingham That address reads now as a perfect revelation of the man In it we see his clear headedness, his pugnacity, his contempt for detail, his worship of good surgery and his glory in his own talents To read it is to understand at once his enormous success as well as his more than occasional failure. Speaking in Birmingham he invited the attention of his hearers to the dexterity of the Birmingham button-cutter He warned modern surgeons against attaching undue importance to elaborate book learning, speaking with open contempt of the man who without mechanical skill and on the strength of a needlessly perfect scientific education embarks upon operative procedure That he unduly emphasised his point, regarding surgery too much in the sense of the craft and being too sweeping in his condemnation of science as an element in the training of the medical student is possible, but it is undoubted that some of the strictures which he at that time considered it to be his duty to pass upon the prevailing trend of professional education were, and are, deserved. We commend the perusal of this address to all Many of the topics are controversial and on many of them our readers might not, as we do not, take the dead orator's view exactly, but in the main Tait was right, and his remarkably pithy and vigorous words make admirable reading

In public life Lawson Tait never abated in his unceasing zeal and efforts to fulfil the objects which he had in view As a member of the town council of Birmingham he took an important part in the health and sanitary deliberations of the council, doing good work upon the Asylums Committee and as chairman of the Health Committee A prominent and enthusiastic politician, he propounded his views after the split of the Liberal party over the Home Rule question with his usual force, and fought as a Gladstonian Liberal in Unionist Birmingham for a seat in Parliament, where in a contest with Mr Jesse Collings he was hopelessly defeated His restlessness of disposition and tenacity of purpose led him into association with most of the public movements during his residence in the town, in all of which he was found to be a dangerous opponent and an aggressive champion of the cause which he took up In this life of constant struggle he made many friends and also many foes, for he never took trouble to conciliate those who differed from him, with relentless criticism continuing to fall upon his adversaries with heavy hostility It was difficult to cross swords with him in controversy as he depended less upon the facts than upon the object which he had in view for a justification of anything he might say Hence his methods often led to avoidance of antagonism on the part of others But, as a rule, Tait's adversaries were ready to allow to their doughty antagonist full credit for courage and for a fine desire to fight on the side, as he conceived it, of the weak and the oppressed He dearly loved a losing cause and a consensus of accepted opinion was anathema maranatha to him Had there been a seriously divided opinion in the medical profession upon the question of the scientific value of experiments on subhuman animal life Tait would have been less ardent in the cause of anti vivisection and more keen to sift the statements and weigh the alleged arguments of the non scientific persons who welcomed him so warmly to their ranks Had Gladstonian Liberalism stood a practical chance at Birmingham half the charm for Tait in contesting for the honour of the Parliamentary representation of the Bordesley division would have been absent Had any other surgeon possessing a tithe of his position or professional skill thrown doubt on the value of the antiseptic methods Tait would have been far less ready to appear as a public sceptic, even though

LAWSON TAIT, F.R.C.S. ENG. & EDIN.

his own rigid attention to cleanliness and technique gave him excellent results

In private life Lawson Tait showed himself to be a man of the widest interests and the most varied knowledge He was a student of archæology, an enthusiastic lover and patron of the drama, and an insatiable collector of *objets d'art* of all sorts, especially Japanese In his numerous contributions to the medical and lay press, and in his many addresses to literary scientific, and philosophical institutions he always showed complete familiarity with the best English models and his style of speech and writing, though devoid of all attempts at embellishment, was excellent in its clear, racy unpretentiousness

Mr Lawson Tait married in 1870 Sybil Annie, daughter of Mr William Stewart, a solicitor of Wakefield who survives him and with whom widespread sympathy will be felt in the loss which she has sustained His death occurred at Llandudno where he had resided of recent years The body was cremated at Liverpool and the ashes are by his testamentary desire to be deposited in Gogarth s cave, an ancient burial cave in the grounds of his Welsh home

QUACKS AND ABORTION

A CRITICAL AND ANALYTICAL INQUIRY

X.[1]

IN our fourth article upon this topic[2] we printed an advertisement of a quack medicine vendor trading under the name of Madame Frain and described how our first letter to this person, enclosing a postal order, had not obtained for us the "remedy" advertised and how although we wrote a second time we did not receive the "remedy," nor did we manage to secure the return of our postal order A glance at the article referred to will remind those who take an interest in this inquiry of the nature of Madame Frain's so called testimonials and we are now able to append an analysis of her "remedy" which a second postal order and possibly a more discreetly veiled letter has obtained for us We may state that none of our letters contained a direct allegation of pregnancy and the subjoined extract from the evidence given at a recent inquest[3] will show the practice alleged to be in force at Madame Frain s establishments by those who serve there

Annie Cross, single, said: I am a manageress a Madame Frain s establishment. I remember the name of Christmas Some six or eight weeks ago such a person came She asked for a bottle of remedy to bring on her courses. I asked her to sign a paper that she was not pregnant. She declined and I did not sell her any I did not take 15s from her The bottle produced is like one of ours I don t know the date when I refused to serve Mrs. Christmas. There is another woman in our service who is not here The question of sale or refusal to sell to a woman depends upon the woman s statement as to whether she is or is not pregnant. The medicine or pills are sold separately The medicine at 4s 6d. and higher prices according to size and the pills 4s 6d. a box. There are no other women who serve in the shop or very rarely I did not offer any stronger medicine at a higher price to the deceased.

This evidence was corroborated at the same inquiry and we note that a further statement was made that Madame Frain, whoever she may be, is not now interested in the business to which she lends her name She, or those who conduct it for her, may or may not expect women who purchase across the counter to sign the form referred to and deny pregnancy, we can only say that our representative purchasing through the post was not asked to make any such statement and made none

L.[4]

Analysis of Madame FRAIN S PILLS

Moisture, 11 50 per cent
Mineral matter 30 00, per cent
Organic extractives 58 50 per cent

Reactions were obtained with the alcoholic extract of the substance of these pills which were strongly suggestive of jalap On distillation a very marked smell of myrrh was evolved No appreciable quantity of pennyroyal could be detected The pills were coated with a pink aniline dye Testing for aloes gave negative results

The pills were accompanied by a leaflet advertising a "Vaginal Injecting Powder" which it stated "relaxes the os uteri (entrance to the womb) thereby greatly facilitating the action of our remedies" This powder consisted of sulphate of zinc coloured with a pink dye.

How such pills and powders can be considered "indispensable to ladies" we do not attempt to guess, but it is easy to see that vaginal injections and purgatives combined might produce abortion

We have now dealt with nearly all the most prominent advertisers of abortifacients and "remedies" obviously liable to be bought as such The result of our articles and of the prominence given to the case of the brothers Chrimes has been that nearly all respectable papers have ceased to insert this class of advertisement, and particularly the advertisements of the persons whom we named, whose pamphlets we discussed, and whose concoctions we analysed There remain, however, two or three advertisers who have become more prominent owing to the disappearance or partial disappearance of some of their rivals We now desire to call attention to the names of these persons and believe that we have only to do this to ensure their advertisements being refused generally as are those of "Dr" Davis, Madame Wood, Allen, and other quacks

M

The first of these firms trades under the name of Dasmail and has, we believe done so at the same place, Walthamstow, for many years No doubt inquiry at the local post-office, should anyone in authority think it worth while to make it, would show the extent of the trade done by a vendor of this class of goods The advertisement of Dasmail is frequently in the following suggestive terms, sometimes it is considerably modified, from which we may conclude that there are newspaper proprietors who while willing to be remunerated for advertising a "never failing remedy for obstructions" nevertheless draw a line somewhere The subjoined specimen is from the *Ilfracombe Gazette* of April 8th

☞ LADIES!

LADIES REQUIRING ASSISTANCE and RELIEF in all FEMALE AILMENTS IRREGULARITIES SUPPRESSIONS and OBSTRUCTIONS can obtain the Most valuable information whereby difficulties are overcome, no matter how Obstinate or Long Standing THIS EXTRAORDINARY MEDICINE has met with immense success in THOUSANDS OF CASES after all others have failed. Read these extracts from Testimonials —

MEXBORO

Dear Madam,—Kindly send me a bottle of your medicine and pills I have tried them before on one occasion they put me right with *Four Doses after Sixteen Weeks* and another time *One Dose did me Good.*—Mrs. L T

SHELTON

Dear Madam,—Will you please send by return one bottle of Medicine and Pills. Your mixture cured me after *Three Months* last spring Hoping this will prove effectual, this being. *No less than Twelve Times you will have Cured me.*—Mrs. G

CHESTER LE STREET

Dear Madam,—I am pleased to say your medicine has proved effectual again. Last time the suppression was of *Five Months* and this time *Three Months.*—Yours truly Mrs. W

The above, and Thousands of similar Testimonials, guaranteed Genuine *Under a Penalty of £100*

Abandon not hope here you will find a Genuine SPECIALITY and CURE. Failure Impossible Send stamped addressed envelope for particulars. A. DASMAIL, Box 259 Langdale House Walthamstow London.

The pamphlets accompanying the remedy are of the nature usually found with these goods Mr Dasmail appears to have dubbed it "Xanthosia," no doubt from the saffron revealed in its analysis and he lays particular stress on Xanthosia and Electric Pills as a remedy specially prepared for obstinate cases but perfectly harmless, the value of which "to Ladies is above all price a real gem of the first water" He prints several testimonials and dwells upon the fact that he holds the original documents, while he vaunts the magnitude of his business which last circumstance we are far from questioning It must be considerably greater than the prevalence of menstrual irregularities not connected with pregnancy would account for in order to pay for half his advertisements

[1] Articles I II., III., IV V VI VII VIII. and IX. were published in THE LANCET of Dec. 10th, 17th, 24th, and 31st 1898, and Jan. 21st Feb. 4th, March 11th and 25th, and April 1st 1899

[2] THE LANCET Dec. 31st, 1898.

[3] THE LANCET March 25th 1899.

[4] We place a letter of the alphabet against each quack for purposes of reference See THE LANCET Dec. 31st 1898.

Analysis of DASMAIL AND CO 'S FEMALE CORRECTIVE MIXTURE SPECIAL SS

Specific gravity, 998
Water, 95 79 per cent
Oil, 4 00 per cent
Organic extractives, 0 16 per cent
Mineral matter, 0 05 per cent

The fluid had a faintly alkaline reaction The oil floating upon the top of the mixture was drawn off and its boiling point was ascertained to be 314° F, its specific gravity being 0 863 These factors are practically identical with those obtained with the oil of pinus pumilio and it possessed a fragrant smell indistinguishable from that of this oil The bright orange colour of the fluid, which was quite opalescent, was found to be due to saffron Saffron is described as anodyne cordial, emmenagogue, and exhilarant, and is clearly a drug that cannot be taken with impunity by women suffering from the only common cause of menstrual obstructions—pregnancy

N

The advertisement of this person is of very frequent occurrence It usually runs as follows —

WOMEN'S AILMENTS

IRREGULARITIES, &c —A Lady, having tried in vain every advertised remedy has at last discovered a Simple Cure which will act in a few hours, no matter how stubborn the case Bonâ fide sufferers can get it Free of Charge by enclosing stamped envelope. Don t experiment with Worthless Pills, Mixtures, Cones, and other injurious nostrums.—Write at once with full hope and confidence, to Mrs O ST CLAIR, 46, Southampton buildings, Chancery lane, London.

The medicine which we received from Mrs St Clair was accompanied by a pamphlet to which we have already referred as putting beyond question the nature of the derangement which she professes to cure, for it offers "for preventing irregularities" the ordinary indiarubber and other goods advertised for the prevention of conception We also note among Mrs St Clair's testimonials one signed "Miss R" which commences thus "It is with unspeakable joy I write to tell you thanks to your wonderful specific all came right Sunday after taking six doses" The satisfaction of a patient for whom an emmenagogue has been successfully prescribed does not as a rule take the form of "unspeakable joy"

Analysis of Mrs ST. CLAIR'S MIXTURE

Specific gravity, 1005
Water, 99 60 per cent
Organic extractives, 0·38 per cent
Mineral matter, 0 02

Nothing in particular could be detected in this mixture It is a simple herbal infusion As will be seen the total extractive matters only amounted to 0 4 per cent, a great part of which was due, as analysis showed, to saccharine matters On releasing the cork from the bottle it was evident that there was pressure inside and bubbles of gas ascended through the fluid In short, it behaved like most herbal infusions and had commenced to ferment According to the appearance of the liquid there is no necessity to "shake the bottle" as is enjoined on the label. The "mixture" was a brownish fluid possessing little character in regard either to taste or smell and monstrously expensive at 6s 6d the bottle

O

Some time ago we received from the editor of one of our best provincial journals a letter complaining that we had made a mistake in inserting the name of his paper in our list of those printing objectionable advertisements This gentleman added that he was in the habit of refusing all such advertisements and invited us to point out that of which we complained Our answer was to send him the following advertisement cut from his newspaper, and as we have not received further remonstrance from him, we conclude that its character is to some extent recognised even by those who do not advertise the more flagrant solicitations of Frain, Dasmail, and the like

TOWLE'S PENNYROYAL & STEEL PILLS
FOR FEMALES

QUICKLY CORRECT ALL IRREGULARITIES REMOVE ALL OBSTRUCTIONS, *and relieve the distressing symptoms so prevalent with the sex.* Boxes 1/1½ & 2/9 (contains three times the quantity), of all Chemists Sent anywhere on receipt of 15 or 34 stamps, by E T TOWLE & Co Manufacturers, Dryden street, Nottingham.

Beware of imitations, injurious and worthless

This advertisement is of very frequent occurrence, indeed, the firm in question must be among the largest advertisers of the class of goods which we have so often defined as being liable to be bought by pregnant women desirous of procuring abortion upon themselves It will be observed that in addition to the statement that the pills "remove all obstructions" there is the statement that they contain pennyroyal—a drug not now used in medical practice, but once enjoying a wide and long established reputation among the poorer classes as an abortifacient Those who purchase Towle's pills will find them accompanied by a paper extolling their merits for the cure of "sick headache, whites eruptions and sallowness of the skin, depression of spirits, languor, lassitude, hysteria, and kindred complaints," while their power to correct "all irregularities" is again dwelt upon and they are styled in large capitals "Woman's unfailing Friend." A second leaflet announces that "Stronger Pills specially prepared for obstinate cases may be sent where required, secure and free from observation, to any part of the United Kingdom" We are not aware, however, of any reason why a woman afflicted with sick headache or any of the other complaints enumerated, none of which can fairly be said to bring disgrace, should be attracted by a suggestion of secrecy, or why even if her case may rank as "obstinate" she should be anxious to have her medicine sent "free from observation"

Analysis of TOWLE S PENNYROYAL AND STEEL PILLS

Moisture, 6 20 per cent
Mineral matter, 57 58 per cent
Organic extractives, 36 22 per cent

On examining the mineral matter it proved to contain both iron and sulphates and had also a distinctly alkaline reaction The pills were coated with a white substance like steatite Very little indication was given of the presence of oleum pulegii (pennyroyal) but reactions were obtained pointing to Barbary aloes

METROPOLITAN HOSPITAL SUNDAY FUND

THE following were among the principal amounts received at the Mansion House during the past week in aid of this Fund The total now exceeds £35,000 —

	£	s	d.
St. Michael Chester-square, with additions	1340	0	0
Christ Church Lancaster-gate	1375	0	6
St Marylebone Parish Church	200	2	1
The Temple Church	108	7	7
Christ Church, Mayfair	184	13	4
St. Alban Streatham park	167	11	7
St. James Piccadilly	195	15	4
All Saints, Bunismore-gardens	402	14	3
St. Stephen Ealing	125	11	8
St. Mary, Kilburn	141	1	9
St. Anne Soho	102	5	0
St. Mark North Audley street	90	12	8
Immanuel Church, Streatham	93	6	11
Central Hill Congregational Church, Upper Norwood	91	0	1
St. Paul Presbyterian Church, Westbourne-grove	85	2	3
Regent-square Presbyterian Church and School	96	3	4
St. Paul, Onslow square	491	6	3
St. Paul, Wilton place and St. Mary Graham-street	384	4	6
St. Stephen South Dulwich	203	9	6
St. John Blackheath.	83	12	10
St. Thomas, Portman square	81	13	10
St. Saviour Upper Chelsea	92	14	6
Holy Trinity Sydenham	220	8	10
St. Michael Highgate	101	10	6
St. Mark Hamilton terrace	273	3	8
Dutch Church, Austin Friars	83	1	6
St. Stephen, Gloucester-road	114	11	4
St. Barnabas Addison road	120	7	5
St. John s Wood Presbyterian Church	82	3	7
St Paul, Avenue-road	111	16	6
St. Matthew Bayswater	140	2	5
Blackheath Congregational Church	135	13	0
St. Sophia (Greek Church) Bayswater	81	4	2
St. Paul, Wimbledon	82	0	0
St. Mary Aldermary St. Thomas St Antholin, City	90	9	1
St. Andrew Fulham	94	6	10
St. Peter Brockley	113	0	0
All Saints, North Peckham	172	10	0
St. George, Hanover square and St. Mary	158	0	1
St. Paul Beckenham.	103	0	0
St. James Kidbrook	96	7	5
Portman Chapel Baker street	83	0	3
St. John Presbyterian Church Kensington	94	0	0
Lyndhurst-road Congregational Church, Hampstead	96	6	10

The records of other amounts have been received and will be published in our next issue

VITAL STATISTICS

HEALTH OF ENGLISH TOWNS

In 33 of the largest English towns 6695 births and 3607 deaths were registered during the week ending June 17th The annual rate of mortality in these towns which had been 17 7 and 16 4 per 1000 in the two preceding weeks, rose again last week to 16 5 In London the rate was 15 1 per 1000, while it averaged 17 4 in the 32 provincial towns The lowest rates in these towns were 9·0 in Croydon, 9 3 in Cardiff, 11 4 in Brighton, and 11 8 in West Ham, the highest rates were 20 8 in Halifax, 21 7 in Burnley, 22 0 in Salford, and 24 8 in Manchester The 3607 deaths included 416 which were referred to the principal zymotic diseases, against 386 and 397 in the two preceding weeks; of these, 142 resulted from measles, 91 from whooping cough, 83 from diphtheria, 48 from diarrhœa, 25 from scarlet fever, 25 from "fever" (principally enteric), and two from small pox. No death from any of these diseases was recorded last week in Brighton, in the other towns they caused the lowest death rates in Cardiff, Bolton, Hudders field, and Sunderland, and the highest rates in Swansea, Burnley, Manchester, and Sheffield The greatest mortality from measles occurred in Liverpool and in Manchester, from scarlet fever in Bradford, and from whooping cough in Plymouth, Salford, Hull, and Gateshead The mortality from "fever" showed no marked excess in any of the large towns The 83 deaths from diphtheria included 35 in London, 10 in Sheffield, six in Leicester nine in Swansea, four in Liverpool, and four in Leeds One fatal case of small pox was registered in Liverpool and one in Hull, but not one in any other of the 33 large towns, and only one case of small pox was under treatment last week in the Metropolitan Asylums Hospitals The number of scarlet fever patients in these hospitals and in the London Fever Hospital on Saturday last June 17th was 2280 against numbers increasing from 2161 to 2269 at the end of the four preceding weeks, 262 new cases were admitted during the week, against 229, 260, and 278 in the three preceding weeks. Influenza was certified as the primary cause of 13 deaths in London The deaths referred to diseases of the respiratory organs in London, which had been 240 and 216 in the two preceding weeks further declined last week to 207 and were 17 below the corrected average The causes of 57, or 1 0 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner All the causes of death were duly certified in Nottingham, Bradford, Leeds, Hull, and in 16 other smaller towns. The largest proportions of uncertified deaths were registered in West Ham, Birmingham, Leicester, and Halifax

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19 9 and 18 9 per 1000 in the two preceding weeks, further declined to 17.9 during the week ending June 17th, but was 1 4 per 1000 above the mean rate during the same period in the 33 large English towns The rates in the eight Scotch towns ranged from 13 5 in Perth and 17 0 in Edinburgh to 19 6 in Paisley and 21 9 in Aberdeen The 546 deaths in these towns included 24 which were referred to diarrhœa, 11 to measles, 10 to whooping cough eight to scarlet fever eight to diphtheria five to "fever" and one to small pox. In all, 67 deaths resulted from these principal zymotic diseases, against 68 and 66 in the two preceding weeks These 67 deaths were equal to an annual rate of 2 2 per 1000, which was 0 3 above the mean rate last week from the same diseases in the 33 large English towns The fatal cases of measles, which had increased from 11 to 25 in the three preceding weeks declined again to 11 last week, of which 10 occurred in Glasgow The 10 deaths from whooping cough showed a decline of six from the number in the preceding week, and included six in Glasgow and three in Leith The fatal cases of scarlet fever, which had been 11 and five in the two preceding weeks, rose again to eight last week of which nine occurred in Glasgow and three in Edinburgh The eight deaths referred to diphtheria exceeded the number recorded in any recent week and included two in Glasgow two in Dundee, and two in Aberdeen Of the five fatal cases of "fever" three occurred in Glasgow where the death from small-pox was also registered. The deaths referred to diseases of the respiratory organs in these towns, which had been 103 and 93 in the two preceding weeks, further declined to 87 last week, and were 21 below the number in the corresponding period of last week The causes of 22, or more than 4 per cent, of the deaths in these eight towns last week were not certified

HEALTH OF DUBLIN

The death-rate in Dublin, which had been 22 1 and 25·2 per 1000 in the two preceding weeks, declined again to 21 5 during the week ending June 17th. During the past four weeks the death rate in the city has averaged 23 8 per 1000, the rate during the same period being 15 9 in London and 17·9 in Edinburgh The 144 deaths registered in Dublin during the week under notice showed a decline of 25 from the number in the preceding week, and included 11 which were referred to the principal zymotic diseases, against five and 11 in the two preceding weeks, of these, four resulted from whooping cough, four from diarrhœa, one from measles, one from scarlet fever, one from "fever," and not one either from small pox or diphtheria These 11 deaths were equal to an annual rate of 1 6 per 1000, the zymotic death rate during the same period being 1 8 in London and 1 9 in Edinburgh The deaths referred to whooping cough, which had been one two and three in the three preceding weeks, further rose to four last week. The mortality from scarlet fever and from "fever" showed a decline from that recorded in the preceding week, while the four fatal cases of diarrhœa exceeded the number registered in any recent week The 144 deaths in Dublin last week included 21 of infants under one year of age and 33 of persons aged upwards of 60 years, the deaths both of infants and of elderly persons were below these recorded in recent weeks Two inquest cases and one death from violence were registered, and 52, or more than a third, of the deaths occurred in public institutions The causes of 6 or more than 4 per cent., of the deaths in the city last week were not certified.

THE SERVICES

ROYAL NAVY MEDICAL SERVICE

DEPUTY INSPECTOR GENERAL THOMAS BROWN to be Inspector General of Hospitals and Fleets Fleet Surgeon C C Godding to be Deputy Inspector General of Hospitals and Fleets The under mentioned surgeons are specially promoted to the rank of Staff Surgeon in Her Majesty's Fleet Octavius William Andrews and William Job Maillard, V C

ROYAL ARMY MEDICAL CORPS

Major G H. Thomas has arrived in England on completion of a tour of service in Gibraltar The following officers have been selected for duty on Salisbury Plain during the manœuvres 1st Cavalry Brigade Major Melville, Royal Horse Artillery, Major Dodd, 2nd Brigade Division R.F.A., Major Recsitt, 1st Infantry Brigade, Lieutenant Hewitt, 2nd Infantry Brigade, Lieutenant Scott, 3rd Infantry Brigade Captain Fachnie, 4th Infantry Brigade, Lieutenant Parker, 6th Infantry Brigade, Lieutenant Gill, 7th Infantry Brigade Lieutenant Jones, 8th Infantry Brigade, Lieutenant Winkfield.

INDIA AND THE INDIAN MEDICAL SERVICES.

To be Brigade Surgeon-Lieutenant Colonel Surgeon-Lieutenant Colonel Matthew Denis Moriarty, Bengal Establishment Majors to be Lieutenant-Colonels *Bengal Establishment* Francis Frederick Perry, Stephen Little, George Hart Desmond Gimlette, Christian Bernard Hunter and Julian Carter Carrington Smith. *Madras Establishment* William Frederick Thomas, Henry George Luther Wortabet Edulji Palamji Frenchman, Richard James, Sarkies Carapiet Sarkies, and David Stuart Erskine Bain. Captains to be Majors *Bengal Establishment* William Henry Wilson Elliot, William Ronaldson Clark, George Frederick William Bruce, Robert John Marks, Charles Edward Sunder, Malcolm Albert Ker Andrew Buchanan Lewis Gordon Fischer, William Vost, John Garvie, Clarence Edwin Lloyd Gilbert, Courtenay Clarke Manifold and Gerard Beatty Irvine *Madras Establishment* Frederick James Crawford, David Simpson, Robert Robertson, and

Thomas Charles Moore *Bombay Establishment* Charles Hardwick Lomb Meyer Letterstedt Frederick Childe, Herbert Herbert, and Thomas David Collis Barry The Queen has approved of the following retirements Colonel Arthur Stephen, Bengal Establishment, Lieutenant-Colonel John Scully, Bengal Establishment, Lieutenant-Colonel Daniel Nicholas Martin, Bengal Establishment, Lieutenant-Colonel Clement Mallins, Madras Establishment, and Lieutenant-Colonel Charles George Walton Lowdell, Bombay Establishment

MILITIA MEDICAL STAFF CORPS

Surgeon-Lieutenant S Oliver resigns his commission

MILITIA MEDICAL STAFF

Surgeon-Lieutenant-Colonel C M Macquibban, 3rd Battalion the Gordon Highlanders, retires under the provisions of paragraph 81 of the Militia Regulations, 1898, with permission to retain his rank and to wear the prescribed uniform on his retirement

VOLUNTEER CORPS

Artillery 1st East Riding of Yorkshire (Western Division, Royal Artillery) Surgeon Major W Draper to be Surgeon Lieutenant-Colonel *Rifle* 2nd Volunteer Battalion the Royal Fusiliers (City of London Regiment) Michael George Foster to be Surgeon Lieutenant 4th Volunteer Battalion the Norfolk Regiment Surgeon Lieutenant G Lowe to be Surgeon Captain 2nd Volunteer Battalion the East Yorkshire Regiment Surgeon Captain A T Brand to be Surgeon Major 3rd Volunteer Battalion the Duke of Wellington's (West Riding Regiment) Surgeon Lieutenant W M Gabriel to be Surgeon Captain

THE PHILIPPINE CAMPAIGN

The Americans, in current phraseology, do not seem to be getting "much forrader" in their conquest of the Philippines Their engagements with the enemy are frequent and so far they have always been favourable to their side they repeatedly attack their opponents and drive them out of their entrenchments with much loss only to find them soon reappearing, however, somewhere else What with the heat and rains, the frequent small fights, the labour and unrest of their troops, there must, we imagine, be a good deal of sickness in the American force In connexion with this subject we may advert to Mr Poultney Bigelow's recent lecture on "The Yankee Soldier" at the Royal United Service Institution While most justly and properly eulogising the conduct and bravery of the American regular troops in the recent war the lecturer gave a description of the lamentable effects of the political system and influences at work in the United States Army, as illustrated by the bragging of political soldiers who became intimate with newspaper reporters and so managed to keep their names before the American public, the passing over of qualified officers trained at West Point in favour of civilians who were appointed to the command of volunteer troops in the field, the breakdown of the supply departments and the absence of all proper organisation observable Military fitness and training, according to the lecturer, apparently gave no claim to selection for appointments in the United States volunteers in competition with political influence The lecturer gave, in brief, such a lamentable revelation of the state of things as to cause his audience to "raise the eyebrows of astonishment" and ask themselves how such an eminently sagacious and practical people as the Americans could tolerate the evils that were alleged to exist General Miles has been publishing some papers in the *North American Review* on "The War with Spain" He describes the fighting at San Juan and in the Santiago campaign The American losses in these encounters with the Spaniards amounted from July 1st to the 12th to some 1500 killed and wounded out of a total force of about 18,000 General Miles very pertinently remarks that an army in the field in these days is almost powerless without very efficient administrative departments We may add that we have but little official information as to what was the actual state of the medical, transport, and supply services during the late Spanish American war or as to the losses that occurred from disease and the nature of those diseases which prevailed

THE ALDERSHOT MILK SUPPLY

As our readers are aware the state of the sewage farm at Aldershot was a frequent subject of complaint in past years and quite recently the War Office authorities were somewhat severely called to account in the House of Commons on the question of the proposed sale of milk from the dairy of that farm That the sewage farm at Aldershot was but little better than a sewage swamp a few years ago would not, we suppose, be denied But since that time it has been put under an entirely new management, great alterations and improvements have been effected and are still being carried out, and a very notable change in its condition has consequently taken place As regards the milk supply the War Office authorities urged that there was no evidence to show that milk obtained from a well managed farm was, in virtue of its origin, a source of disease, citing the case of Birmingham as an example, and that they were acting with the approval of their own sanitary advisers Still, they were quite ready to submit the matter to some independent authority Dr Andrewes of St Bartholomew's Hospital was, on the advice of Sir Richard Thorne, selected for the purpose He was asked to examine the conditions of the Aldershot camp sewage farm and advise whether any of the circumstances there present are such as to throw doubts upon the safety of making use of the milk produced upon the farm for human consumption Dr Andrewes, after full and independent inquiry, has made his report, which quite bears out the view taken by the War Office, consequently there can be no objection to employ the farm profitably It is notorious that dairies exist in connexion with many sewage farms in this and other countries and that the sale of milk forms an important item of income If proper precautions be taken no harm results Dr Andrewes found no conditions on the Aldershot farm liable to render the milk more dangerous for human consumption than that obtained from any other well managed sewage farm

THE PEACE CONFERENCE

The deliberations of the Peace Conference at The Hague, notwithstanding the general desire which, it may be assumed, animated the delegates, are not, we fear, likely to effect much practical good So many conflicting interests are involved and the whole subject is so complicated and surrounded with difficulties that no general agreement upon many points seems probable The scheme of international arbitration through the instrumentality of an organised arbitration tribunal, although generally acceptable to the Great Powers, has not yet received the assent of Germany Should it do so this will be the only important gain realised by the Conference, it is at least a step on the road to peace The project for the limitation of armaments proved futile at an early stage of the proceedings and the discussions regarding proposed modifications of the Geneva and Brussels Conventions, in which members of the medical services are most interested, gave rise to attacks upon some of our British methods of strategy and tactics But many of the delegates apparently did not really know the true character of the Dum Dum bullet, and as regards naval warfare, in which Britain is mainly, if not supremely, concerned, the adoption of some of the proposals at the Conference would, it is believed, greatly hamper this country It is lamentable that the result of the Czar's humane enterprise—for no one doubts that monarch's personal humanity and *bona fides* as apart from the traditional military policy of the Russian Empire—should not be greater, but the outcome of the International Conference was foreseen from the beginning

THE ROYAL ARMY MEDICAL CORPS MANUAL

In the new Manual for the Royal Army Medical Corps which has recently been published considerable alterations and improvements have been made in stretcher drill No 4 bearer is now in the rear rank and acts as a supernumerary as long as the company is in close order In moving to a flank the stretcher is carried at the slope by No 2 bearer only In extended order No 4 bearer takes his post on the opposite side of the stretcher so that the changing of the numbers is much simplified A new method of lifting the wounded on stretchers as suggested by the staff of the Volunteer Ambulance School of Instruction has been adopted each squad halts when No 1 arrives one pace from the patient's head, Nos 2 and 3 correctly covering in a line with the patient There is no change in the hand seat drill. In the wagon drill Nos 2 and 4 are now on the right of the stretcher In the plans of the dressing station and field hospital camp a new operating tent is shown, the length of which is 20 feet, the width 14 feet—this gives far more room than did the old pattern bell tent Semaphore signalling has

been authorised for the Royal Army Medical Corps, and will probably be most useful in connecting the dressing station with the field hospital and collecting stations and fighting line

DEATHS IN THE SERVICES.

Deputy Surgeon General W R Lane (retired) in London on Saturday, June 17th, in his sixty sixth year

Civil Surgeons J P Stephens Ward L R C P Lond, M R C S and Civil Surgeon J Trelawny Cheves, M R C S, L S A, of Plymouth, have been appointed to the medical charge of the troops at Crownhill and Tregantle (Plymouth) respectively from June 17th in place of Major Lilly and Lieutenant Norrington R A M C, selected for duty on Salisbury Plain during the manœuvres

Correspondence.

"Audi alteram partem."

"THE MICROCOCCUS OF BERI-BERI"

To the Editors of THE LANCET

SIRS,—I have just read in THE LANCET of June 17th Dr W Gilmore Ellis's letter on the micrococcus of beri-beri In reply I would point out to Dr Ellis that if he had read with more attention my communications on the 'Etiology of Beri beri'[1] he would have seen that it was on the strength of inoculation experiments that I concluded the micro-organism in discussion to have pathogenic properties The micrococcus which I cultivated from the blood of my four cases of beri beri was certainly by no means a virulent micro-organism, but I think my investigations showed that when present in sufficient quantity it is quite sufficiently virulent to produce a well marked peripheral neuritis The other point raised by Dr Ellis—the question of this micrococcus being found in the blood of "healthy patients" in an infected district—has been so fully discussed by Pekelharing and Winkler in their admirable book on Beri-Beri (now translated into English) that beyond referring Dr Ellis to that book nothing remains for me to say

I am, Sirs, yours faithfully,

Glasgow June 19th, 1899 WALTER K. HUNTER

COUNTY OF DURHAM MEDICAL UNION

To the Editors of THE LANCET

SIRS,—We are still in the midst of our struggle for increased remuneration and although we have obtained a certain measure of success, yet there is much more to be done We would fain look for assistance from the British Medical Association or from the General Medical Council but we feel that this is only visionary We have now a membership of at least 200 and 12 local committees have been formed in different parts of the county, each with its chairman and secretary, some of these committees meet every fortnight or every month and discuss the process of getting more remuneration for their services A pleasant side to all our work is the bringing medical men into closer touch with each other and we feel sure that by cementing the union and getting it established on a firm basis we shall improve the status and dignity of the profession generally As viewed at present the profession is in a deplorably weak state and there are hosts of grievances without any means of rectifying them We are told that if we in our struggle very soon obtain a splendid result then other counties will think of forming unions I would earnestly plead with the medical men of other counties and especially those adjoining this county to commence the formation of a union as soon as possible not only for their own sakes but also as a help to this union As it is the fact of our isolated action is a drag in itself against more substantial progress A confederation of such unions in each county would rapidly sweep away many of the anomalies which now exist Our annual meeting will be held on June 27th in the city of Durham at 2 15 P M and during the afternoon a social gathering in the Town Hall will take place called an At Home, given by the local committee I am sure we will cordially welcome the presence of medical men from other counties at the meeting, and by communicating with me their visit shall be made a comfortable one.

I am, Sirs, yours faithfully,

EDWARD JEPSON, M D Durh,

President of the County of Durham Medical Union.

2, Old Elvet Durham, June 18th, 1899.

THE LATE DR G F CROOKE

To the Editors of THE LANCET

SIRS,—We beg leave to make an appeal through the columns of THE LANCET on behalf of the widow and infant son of the late Dr G F Crooke

Dr Crooke's promising career in pathology was marred by incurable nephritis following scarlet fever which he contracted when medical officer to the Leeds Fever Hospital, and at a later period whilst pathologist to the Birmingham General Hospital, his health was still further undermined by a dangerous septicæmia. His untimely death, at the age of 46 years, is therefore peculiarly affecting because due to disease incurred in the exercise of his profession. As he was unable to insure his life or make other provision for those dependent upon him Mrs Crooke and her little boy are left wholly without support It is earnestly hoped that by the generous response of the profession a sufficient amount may be raised to establish Mrs Crooke in some suitable pursuit Contributions will be very gratefully received by the treasurer of the fund, Dr. Arthur Foxwell, 22, Newhall street, Birmingham, or by either of the undersigned

We are, Sirs yours faithfully,

GILBERT BARLING, 85, Edmund-street, Birmingham
J T J MORRISON, 3 Great Charles-street, Birmingham
} Honorary Secretaries of the Fund.

June 18th 1899.

First List of Contributors

	£	s.	d.
Dr A. G Barrs	10	10	0
Mr Gilbert Barling	5	5	0
Dr Arthur Foxwell	5	5	0
Mr W F Haslam	5	5	0
Dr O J Kauffmann	5	5	0
Dr C. J Lewis	5	5	0
Mr Jordan Lloyd	5	5	0
Mr Frank Marsh	5	5	0
Mr Bennett May	5	5	0
Mr. J T J Morrison	5	5	0
Mr G A. Wright	3	3	0
Mr George Heaton	2	2	0
Dr J W Russell	2	2	0
Dr T S. Short	2	2	0
Mr W E. Bennett	1	1	0
Mr N Hodgetts	1	1	0
Mr C Lamplough	1	1	0
Mr Christopher Martin	1	1	0
Dr C. E. Purslow	1	1	0
Dr J R. Ratcliffe	1	1	0
Dr Robert Saundby	1	1	0
Mr Priestley Smith	1	1	0
Mr J W Taylor	1	1	0
Mr E. B. Whitcombe	1	1	0
Dr Thos. Wilson	1	1	0
Professor Windle, F R.S.	1	1	0
Mr L. Gamgee	0	10	6

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC

To the Editors of THE LANCET

SIRS,—In your report of the dinner of the Medical Graduates' College, I find myself credited with having given upwards of a thousand pounds to the College This is an error The sum announced in my name at the dinner was my 'stewards list,' and of it my personal contribution formed but a small part.

I am, Sirs, yours faithfully

June 21st, 1899. JONATHAN HUTCHINSON

NOTES FROM INDIA

(FROM OUR SPECIAL CORRESPONDENT)

The General Decline of the Plague —The Outbreak of Cholera at Karachi —Successful Treatment for the Rinderpest

THE plague returns for the week ending May 27th show a further great drop in the total mortality, which was 953 last week and only 646 this In Bombay city the mortality has fallen from 221 to 147 in Karachi from 96 to 17, and in the rest of the Bombay Presidency from 560 to 397 In the Madras Presidency there were only nine deaths from plague, in the Bengal Presidency Calcutta recorded 39 deaths, and in other parts of India only a few deaths were reported.

[1] THE LANCET July 31st, 1897 and June 4th, 1898.

Thomas Charles Moore *Bombay Establishment* Charles Hardwick Lomb Meyer, Letterstedt Frederick Childe, Herbert Herbert, and Thomas David Collis Barry The Queen has approved of the following retirements Colonel Arthur Stephen, Bengal Establishment, Lieutenant-Colonel John Scully, Bengal Establishment, Lieutenant-Colonel Daniel Nicholas Martin, Bengal Establishment, Lieutenant-Colonel Clement Mallins, Madras Establishment, and Lieutenant-Colonel Charles George Walton Lowdell, Bombay Establishment

MILITIA MEDICAL STAFF CORPS

Surgeon Lieutenant S Oliver resigns his commission

MILITIA MEDICAL STAFF

Surgeon Lieutenant-Colonel C M Macquibban, 3rd Battalion the Gordon Highlanders retires under the provisions of paragraph 81 of the Militia Regulations, 1898, with permission to retain his rank and to wear the prescribed uniform on his retirement

VOLUNTEER CORPS

Artillery 1st East Riding of Yorkshire (Western Division, Royal Artillery) Surgeon Major W Draper to be Surgeon Lieutenant Colonel *Rifle* 2nd Volunteer Battalion the Royal Fusiliers (City of London Regiment) Michael George Foster to be Surgeon Lieutenant 4th Volunteer Battalion the Norfolk Regiment Surgeon Lieutenant G Lowe to be Surgeon Captain 2nd Volunteer Battalion the East Yorkshire Regiment Surgeon Captain A T Brand to be Surgeon Major 3rd Volunteer Battalion the Duke of Wellington s (West Riding Regiment) Surgeon Lieutenant W M Gabriel to be Surgeon Captain

THE PHILIPPINE CAMPAIGN

The Americans, in current phraseology, do not seem to be getting "much forrader" in their conquest of the Philippines Their engagements with the enemy are frequent and so far they have always been favourable to their side they repeatedly attack their opponents and drive them out of their entrenchments with much loss only to find them soon reappearing, however, somewhere else What with the heat and rains, the frequent small fights, the labour and unrest of their troops, there must, we imagine, be a good deal of sickness in the American force In connexion with this subject we may advert to Mr Poultney Bigelow's recent lecture on "The Yankee Soldier" at the Royal United Service Institution While most justly and properly eulogising the conduct and bravery of the American regular troops in the recent war the lecturer gave a description of the lamentable effects of the political system and influences at work in the United States Army, as illustrated by the bragging of political soldiers who became intimate with newspaper reporters and so managed to keep their names before the American public, the passing over of qualified officers trained at West Point in favour of civilians who were appointed to the command of volunteer troops in the field, the breakdown of the supply departments and the absence of all proper organisation observable Military fitness and training, according to the lecturer, apparently gave no claim to selection for appointments in the United States volunteers in competition with political influence The lecturer gave, in brief, such a lamentable revelation of the state of things as to cause his audience to "raise the eyebrows of astonishment" and ask themselves how such an eminently sagacious and practical people as the Americans could tolerate the evils that were alleged to exist General Miles has been publishing some papers in the *North American Review* on "The War with Spain" He describes the fighting at San Juan and in the Santiago campaign The American losses in these encounters with the Spaniards amounted from July 1st to the 12th to some 1500 killed and wounded out of a total force of about 18,000 General Miles very pertinently remarks that an army in the field in these days is almost powerless without very efficient administrative departments We may add that we have but little official information as to what was the actual state of the medical, transport, and supply services during the late Spanish American war or as to the losses that occurred from disease and the nature of those diseases which prevailed

THE ALDERSHOT MILK SUPPLY

As our readers are aware the state of the sewage farm at Aldershot was a frequent subject of complaint in past years and quite recently the War Office authorities were somewhat severely called to account in the House of Commons on the question of the proposed sale of milk from the dairy of that farm That the sewage farm at Aldershot was but little better than a sewage swamp a few years ago would not, we suppose, be denied But since that time it has been put under an entirely new management, great alterations and improvements have been effected and are still being carried out, and a very notable change in its condition has consequently taken place As regards the milk supply the War Office authorities urged that there was no evidence to show that milk obtained from a well managed farm was, in virtue of its origin, a source of disease, citing the case of Birmingham as an example, and that they were acting with the approval of their own sanitary advisers Still, they were quite ready to submit the matter to some independent authority Dr Andrewes of St Bartholomew's Hospital was, on the advice of Sir Richard Thorne, selected for the purpose He was asked to examine the conditions of the Aldershot camp sewage farm and advise whether any of the circumstances there present are such as to throw doubts upon the safety of making use of the milk produced upon the farm for human consumption Dr Andrewes, after full and independent inquiry, has made his report, which quite bears out the view taken by the War Office, consequently there can be no objection to employ the farm profitably It is notorious that dairies exist in connexion with many sewage farms in this and other countries and that the sale of milk forms an important item of income If proper precautions be taken no harm results Dr Andrewes found no conditions on the Aldershot farm liable to render the milk more dangerous for human consumption than that obtained from any other well managed sewage farm

THE PEACE CONFERENCE

The deliberations of the Peace Conference at The Hague, notwithstanding the general desire which, it may be assumed, animated the delegates, are not, we fear, likely to effect much practical good So many conflicting interests are involved and the whole subject is so complicated and surrounded with difficulties that no general agreement upon many points seems probable The scheme of international arbitration through the instrumentality of an organised arbitration tribunal, although generally acceptable to the Great Powers, has not yet received the assent of Germany Should it do so this will be the only important gain realised by the Conference, it is at least a step on the road to peace The project for the limitation of armaments proved futile at an early stage of the proceedings and the discussions regarding proposed modifications of the Geneva and Brussels Conventions, in which members of the medical services are most interested, gave rise to attacks upon some of our British methods of strategy and tactics But many of the delegates apparently did not really know the true character of the Dum Dum bullet, and as regards naval warfare in which Britain is mainly, if not supremely, concerned, the adoption of some of the proposals at the Conference would, it is believed, greatly hamper this country It is lamentable that the result of the Czar's humane enterprise—for no one doubts that monarch's personal humanity and *bona fides* as apart from the traditional military policy of the Russian Empire—should not be greater, but the outcome of the International Conference was foreseen from the beginning

THE ROYAL ARMY MEDICAL CORPS MANUAL

In the new Manual for the Royal Army Medical Corps which has recently been published considerable alterations and improvements have been made in stretcher drill No 4 bearer is now in the rear rank and acts as a supernumerary as long as the company is in close order In moving to a flank the stretcher is carried at the slope by No 2 bearer only In extended order No 4 bearer takes his post on the opposite side of the stretcher so that the changing of the numbers is much simplified A new method of lifting the wounded on stretchers as suggested by the staff of the Volunteer Ambulance School of Instruction has been adopted each squad halts when No 1 arrives one pace from the patient's head, Nos 2 and 3 correctly covering in a line with the patient There is no change in the hand seat drill. In the wagon drill Nos 2 and 4 are now on the right of the stretcher In the plans of the dressing station and field hospital camp a new operating tent is shown, the length of which is 20 feet, the width 14 feet—this gives far more room than did the old pattern bell tent Semaphore signalling has

[illegible] in other [illegible]. Experience [illegible] [illegible] [illegible]. Many [illegible] [illegible] [illegible] anything [illegible] general [illegible] [illegible] [illegible]. In [illegible], however [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]—the [illegible] of the School of Tropical Diseases have [illegible] [illegible] an expedition to the West Coast of Africa [illegible] purpose of investigating the causes of malaria and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] expedition will start for Sierra Leone early in August, when the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] conditions are most favourable for research. [illegible] means to continue the researches [illegible] [illegible] specially employed by the Government of India [illegible] purpose. He hopes to prove [illegible] [illegible] [illegible] the Pasteur Institute, Professor [illegible], Professor Grassi, Professor [illegible], Professor Bignami, Professor [illegible], Dr Patrick Manson and others that malaria is caused by the [illegible] of a certain species of mosquito. The expedition will [illegible] [illegible] the [illegible]. The results of the expedition, if successful, will be of immense [illegible], both scientifically and commercially, and its progress will be carefully watched [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

The Sewerage of Lower Bebington [illegible]

The [illegible] council of Lower Bebington have prepared a scheme for the sewerage of [illegible] [illegible] [illegible] [illegible] [illegible] the Local Government Board to sanction the works and also to grant borrowing powers for the amount of money necessary to carry out the scheme. At present the district is drained by means of several sewers which discharge into Bromborough Pool. At low water and especially in hot weather the pool becomes a source of danger to public health. The engineer to the Lower Bebington District Council proposed to construct a main outfall sewer and to intercept all the sewers which at present discharge into the pool, carrying the sewage into the main channel of the River Mersey where it would be rapidly carried away by the action of the tide. In consequence of this sewer being placed on the foreshore it was necessary to give notice to the Board of Trade who communicated with Vice-Admiral Sir George Nares, the acting conservator of the Mersey, and the representatives of the Manchester Ship Canal. Both Sir George Nares and the representatives of the Ship Canal took exception to the carrying out of the proposed scheme. A conference took place at Lower Bebington [illegible] [illegible] in the scheme, at which Sir George Nares was present. It appears that already Liverpool, Birkenhead, Wallasey, Garston, and other places all discharge their sewage into the Mersey, to which objection is taken by Sir George Nares. It was stated at the conference by Sir George Nares that the time was rapidly approaching when all these towns, including Liverpool, must provide some other means of removing their sewage than by discharging it into the Mersey, or at all events only to discharge during ebb-tide. This statement has caused some consternation in Liverpool, as it is computed that the construction of new sewerage works would involve the expenditure of some millions of pounds sterling.

Birkenhead Hospitals Demonstration.

The annual demonstration in aid of the Birkenhead hospitals took place on June 17th. The total number of collecting boxes distributed was 800. The ladies committee had arranged a number of flower-stalls in different parts of the town where fruit and flowers were sold. Sports were held in the Birkenhead football ground. The boys of H.M.S. [illegible] [illegible] gave an [illegible] [illegible] [illegible] and [illegible] were also [illegible] [illegible] [illegible] the fund. The amount obtained from these sources will be given in a future [illegible].

[illegible] [illegible] Measles in Liverpool.

Liverpool has had its share in the epidemic of measles which is now so prevalent throughout the country. During the [illegible] ending June [illegible] there were 10 deaths from this [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. At the request of [illegible] [illegible] [illegible] [illegible] [illegible] of the School Board [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] fortnight. [illegible] [illegible] [illegible] [illegible] the most effective manner of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the schools [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] of the disease has [illegible] [illegible] [illegible] in Liverpool as it has been in Manchester and other large centres of population where [illegible] [illegible] [illegible] [illegible] [illegible] have been more numerous than in Liverpool.

Cremation of the Late Mr Lowther [illegible].

The remains of the late Mr Lowther [illegible] were cremated at Anfield on June 16th. The arrangements were carried out on the most simple lines. The ashes were placed in an urn and taken to [illegible] whence the remains had been removed to Liverpool on the morning of the cremation.

Hospital Sunday Fund.

The [illegible] amount of the street collection made on June 3rd on behalf of the Hospital Saturday Fund was [illegible] [illegible] being an increase of £105 [illegible] [illegible] on last year's collection.

June [illegible].

SCOTLAND

(FROM OUR OWN CORRESPONDENTS.)

Chair of Physiology in Edinburgh University.

At a meeting of the curators of the University of Edinburgh held on June 16th the curators, after consideration of the claims of the various candidates for the chair of Physiology, unanimously appointed Edward Albert Schäfer, M.R.C.S. Eng., LL.D. Aberd., F.R.S., Jodrell Professor of Physiology in University College, London. All the curators were present—namely, Principal Sir William Muir, Lord Justice General Robertson, Dr Patrick Heron Watson, Lord Provost Mitchell Thomson, Sir James Alexander Russell, Lieutenant-Colonel Alexander Forbes Mackay, and Mr G. Auldjo Jamieson, C.A.

Scottish Microscopical Society.

The annual general meeting of the Scottish Microscopical Society was held on June 16th. Dr E. Wace Carlier contributed a paper, the title being "A Further Communication on the Ciliated Cells of the Mammalian Kidney."

A University Anatomical Society.

There has just been inaugurated the Anatomical and Anthropological Society of the University of Aberdeen. The subjects for consideration are indicated by the title. Professor Reid has been appointed president of the society, which will be open to undergraduates and graduates of Aberdeen University.

"The Maladministration of Justice in Scotland."

Under this heading Sir Charles Cameron, M.D. Dub., LL.D., M.P., has published in pamphlet form an outline of the extraordinary case of Mr John Lamont, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., lately a Poor-law medical officer in the Hebrides. An outline of the circumstances has already appeared in THE LANCET of March 25th, p. 850. His district seems to have included three islands, one of which, Eriskay, was visited by an epidemic in 1897. Several deaths occurred, and the people being panic-stricken would neither attend the sick nor place the deceased in coffins, and the Scottish Local Government Board having ordered an inquiry censured the parish council but highly commended Mr Lamont. In four or five months the parish council dismissed Mr Lamont and about two months after he was deprived of his office a warrant for his arrest was obtained from the honorary sheriff substitute, Mr Murdo Tolmie Mackenzie, M.B., C.M. Edin., of North Uist, also in the Hebrides. Mr Lamont was eventually tried at Inverness on a charge connected with the granting of vaccination certificates, but was acquitted. Sir Charles Cameron immediately questioned the Lord Advocate in the House of

Compared with previous returns these figures show a marked decline of the epidemic They must not be taken as accurate for they under estimate to a large amount the fatality from this disease With regard to the city of Calcutta it is curious to observe that notwithstanding the existence of plague as well as a considerable number of deaths which are returned as suspected plague the general death rate is only at the rate of 28 2 per 1000 per annum against an average of 30 5 for the past five years

In Bombay city the deaths from plague have now become reduced to from 15 to 20 per day, but as the weekly mortality is considerably more than this proportion above the average large numbers of cases must still continue to be concealed and to be registered under other diseases

An outbreak of plague is reported at Penang and a fresh outbreak is reported at Belgaum The number of cases of plague in Hong Kong has doubled during the past week.

The cholera outbreak at Karachi shows signs of decided abatement, but only after nearly 1500 people have fallen victims to it and a maximum of over 250 cases a day has been reached It has been a very serious visitation not only as regards numbers but in the high percentage of deaths to attacks The explanation of its origin seems to be as follows Some 8000 famishing Mekranis driven from their homes in the Beluch State of Lus Beyla by scarcity of food encamped in the outskirts of the town with a number of others of the same class There is a sewage farm near at hand somewhat above the level of the spot where these people congregated They drank water from the wells thereabouts and being in low condition they were in a state favourable for the spread of cholera Now that the Malir public supply is extended to the stricken suburbs and the wells are closed the disease is abating, and as it has not extended to any district possessing a good water supply the argument which connects the outbreak of cholera with water contamination seems highly probable There is also a burial-ground near the spot chosen by these people for encampment

Some successful inoculations against rinderpest have been carried out recently in the Bareilly district by Captain Rogers of the Imperial Bacteriological Laboratory at Muktesar The serum method has been employed This appears to have prophylactic as well as curative properties In one of the villages more than half the cattle are said to have been attacked Of the survivors a considerable proportion were inoculated at the request of the villagers and none of the animals so treated subsequently contracted the disease although several cases with some deaths took place among the remainder of the uninoculated animals A few cases in the early stage of the disease were treated with the serum and it is said that equally good results were obtained The account states that the immunity is produced much more quickly than in the bile process and it is said also to last much longer

May 31st.

BIRMINGHAM

(FROM OUR OWN CORRESPONDENT)

Consulting Institution

THE following notice of resolutions has been issued by Dr Saundby, chairman of a meeting of consultants held on June 15th They are to be submitted to a general meeting of the profession called for June 23rd

1 That this meeting of registered medical practitioners residing in or near Birmingham objects to the proposed consulting institution on the following grounds:—(a) that it is proposed that non medical employers shall exploit the services of medical men—in other words, shall employ medical men to earn fees pay them by salary and deal with the proceeds at their own pleasure (b) that no restriction is proposed as to the class of persons to be received as patients so that persons well able to afford the usual consultation fees would obtain a concession to which they have no claim (c) that it is proposed to incorporate the institution as a limited company to carry on the business of physicians and surgeons, and that this is contrary to the Bill which has passed the House of Lords entitled An Act to Amend the Companies Acts, which has received the support of the General Medical Council and the British Medical Association and (d) that such an institution would assuredly seek to procure patients by advertising and canvassing in contravention of professional rules and any practitioner holding service in it would render himself liable to the censure of the General Medical Council.

2. That this meeting records its opinion that no registered medical practitioner should take office in an institution open to these objections.

Crematorium Meeting

A largely attended meeting was held on June 14th in the Council House to further the interests of cremation and to provide a crematorium in Birmingham Alderman Johnson presided The Bishop of Coventry dealt with the religious aspect of the question, in which he sought to dispel the popular sentiments on the subject of earth burial Sir Charles Cameron gave his experience as derived from observation in Glasgow and combated the objections made on the ground of expense, detection of crime, and other details He strongly urged the establishment of a properly regulated association Mr J Hervey Simpson, secretary of the Manchester Crematorium, also added information as to the manner in which the various processes leading to the ultimate destruction of the body can readily be obtained Resolutions in favour were unanimously passed

Need for Reform

A gruesome discovery of the bodies of nine infants was lately made in a cellar in one of the poorer suburbs of the town The occupant of the house was a midwife whose avocations had been interfered with by her illness hence her inability to see that the bodies were duly buried The difficulty of dealing with such cases was pointed out by the coroner who showed that in case of still born children the birth is not registered, therefore no burial order is required from the registrar Curiously there is no law to compel a corpse to be buried so long as no nuisance is caused to public health The coroner has pointed out the need of some legislative enactment to deal with such cases Certainly it would appear that it is necessary in such instances as the one recorded

Mason University College Pathological Department

During the past two or three years the growth of this department has been of a remarkable character owing to the very large and increasing amount of bacteriological work which has been carried on for the various sanitary authorities in the Midlands Two years ago the college undertook to conduct the examinations of throat secretions from cases of suspected diphtheria for the Health Committee of the City Council of Birmingham, and since that time the system has extended to the counties of Staffordshire and Shropshire and to most of the corporations within 20 miles of Birmingham, the scheme in some instances including typhoid fever and tuberculosis as well as diphtheria The number of students preparing for diplomas in public health has increased 50 per cent and special complete courses in bacteriology have been arranged for them Special bacteriological instruction of an elementary character is also given to general practitioners The work having become too heavy and important for anyone but a specialist devoting the whole of his time to it, the council of the college at their last meeting appointed Dr R F. C Leith as Professor of Pathology and Bacteriology to give his entire services to the department Dr Leith is an assistant physician to the Royal Infirmary of Edinburgh, and Lecturer on Pathology and Bacteriology at Surgeons' Hall, Edinburgh As a teacher he has acquired a very high reputation and his contributions to medical literature show his capacity in the field of research. Dr Leith will commence his duties in the new laboratory, which is being built for him, in October next

June 20th

LIVERPOOL

(FROM OUR OWN CORRESPONDENT)

School of Tropical Diseases Inaugural Lecture by Major Ross, I M S, on the Possibility of Extirpating Malaria Expedition to West Africa

MAJOR RONALD ROSS, the lecturer in tropical diseases at University College, gave his inaugural lecture on June 12th in the Arts Theatre of the College The chair was occupied by Principal Glazebrook and the audience included the Lord Mayor and many prominent citizens Major Ross observed that the Liverpool School of Tropical Diseases had been established at a most favourable time, bearing in mind the recent discoveries for the extirpation of malaria It must not be supposed that malaria would be extirpated all over the world They were now endeavouring to extirpate it in a certain sphere and if success attended their efforts they would consider it a satisfactory commencement, and he had no doubt that a similar result could

Medicine Dr Hamonic proposed the medical profession in Paris should entertain him at a banquet which accordingly was held at the Grand Hotel on June 6th Dr Brouardel Dean of the Faculty, presided, and a host of medical celebrities were present including Dr Cornil, Inspector-General of the Naval Medical Service, Professor Pinard, and Dr Lacorde

Treatment of Lupus

At the meeting of the Society of Dermatology and Syphilography held on June 8th M Nélaton showed a series of patients who had been the subjects of lupus and who had been treated by excision and plastic operations When, as was the case in a woman operated on by him the disease occupies the central part of the nasal region without destroying the nostrils the preservation of the latter enables the nose to be completely covered, but there nevertheless remain the drawbacks inseparable from every cicatrical process subsequent to a plastic operation—namely, the unequal thickness of the parts and more especially the swelling at the menstrual period. This method is unsuccessful when both nostrils are affected, but if only one nostril is involved the results are fairly good When lupus attacks the cheeks excision extending a quarter of an inch beyond the margin of the disease, followed by skin grafting on Thiersch's system, gives excellent results, but not until the expiration of six months the patient's appearance at an earlier period being unsightly In a case of lupus of the foot and leg excision and the application of Thiersch grafts proved very successful the cicatrices being smooth, even, and not adherent to the tendons Primary relapses may occur after the excision of extremely small patches of lupus. Three-fourths of the cases do not relapse M Nélaton considers that the only treatment for lupus consists in going beyond the limits of the disease and in proceeding as if the case were one of cancer M Brocq who has operated on many patients for lupus, employing total excision for some and scraping for others, gives the preference to the former method which produces excellent results, especially if the cicatrices are Thiersch grafts. In one of his patients operated on more than a year ago there has been no relapse. The operation is especially adapted for lupus of the cheeks; in lupus of the fingers cauterisation gives better results Scraping followed by the thermo-cautery is applicable to extensive areas of disease when an immediate effect is desired, the cautery may be afterwards applied to foci of relapse whenever they show themselves M Sabourraud made an important contribution to the discussion by mentioning that histological examination of the material obtained by scraping always shows giant cells cut in two, whilst after excision the tuberculous lesions are entirely above the level of the surface which is left. Excision appears therefore to be the only radical treatment.

Statue of Baron Larrey

A statue of Baron Larrey formerly President of the Military Board of Health and a Member both of the Institute and of the Academy of Medicine, was unveiled on June 8th in the garden of the military hospital and medical school at Val-de-Grace. The statue, which has been erected by subscription is in bronze after the design of the sculptor Falguière, and faithfully reproduces the smiling and handsome countenance of the famous military surgeon. The ceremony was attended by the notabilities of the medical world and of the army General Zurlinden, Governor of Paris, presided and was accompanied by Inspector-General Dujardin Beaumetz, president of the Health Committee and by Inspector Kelsen, director of the medical school of Val-de-Grace. Each of these last two gentlemen delivered an address on the subject of Military Medicine and Professor Guyon, chairman of the Subscribers' Committee, made a speech in which he handed over the statue to the State.

New Member of the Academy of Medicine

The vacancy in the Academy of Medicine occasioned by the recent death of Professor Laboulbene has been filled by the election of Professor Raymond by 71 votes against four given to M Vaillard, one to M. Dejerine, and four blank papers M Raymond is clinical professor of nervous diseases at the Hospital de la Salpetriere, where he succeeded his teacher Charcot. He was educated at the school at Alfort and commenced life as a veterinary surgeon It is rare for a veterinary surgeon to become an eminent authority on nervous and mental diseases.

Administrative Notes

The administrative authorities of the Assistance Publique have at last decided to send to the superintendents of the hospitals a circular stating that notices are being printed to remind patients who come to the hospitals for consultation that these consultations are exclusively for poor persons and not for the well-to-do These notices are intended to be exhibited in the consultation rooms and waiting rooms The circular, however, does not make the exhibition of the notices obligatory, but merely asks the superintendents who are the medical men who desire to make use of them and intimates that the requisite number of copies will be supplied

The Army Medical Service

The Bill for increasing the number of military surgeons has been read a first time in the Senate June 8th.

ROME

(FROM OUR OWN CORRESPONDENT)

Assassination of the "Medico Primario" of the Santo Spirito Hospital

A FUNERAL procession nearly a mile long and composed of many thousands of the citizens professional and other attested the grief of all Rome at the cruel murder of Dr Enrico Bondi, the head of the medical clinique of the Santo Spirito Hospital The facts are these On the afternoon of Tuesday last (June 13th) as the eminent physician in question was walking across the iron bridge which spans the Tiber near the Castle of S. Angelo he was suddenly assailed by a man of low stature, of atrabilious complexion, and wearing a coal black moustache Without a word of warning the miscreant struck at the doctor with a tenpenny nail sharpened at the point and inflicted a deep wound in the throat He then took to flight throwing the nail into the Tiber and leaving his victim on the ground bleeding profusely from the mouth The wayfarers on the bridge who had witnessed the assault gave immediate chase, shouting, 'All assassino, all assassino, fermatelo' (Go for the assassin the assassin, stop him') and in a few minutes he was seized by the porter of the Banca d'Italia and with the aid of a soldier of the Engineers consigned to the barracks of that corps Meanwhile at the Santo Spirito Hospital itself the body of its beloved and valued "Primario" was being tended with every care—his colleagues on the spot and his professional brethren summoned by telephone from other hospitals all bearing a hand But an hour and a quarter after the assault he breathed his last, the wound having pierced the neck and pharynx, dividing their main vessels and causing uncontrollable hæmorrhage The consternation and sorrow, beginning with the whole *personnel* and inmates of the Santo Spirito Hospital and spreading to the humblest of the population, cannot be described—the doctor being a "civis Romanus" of the most genial type in the prime of life (42 years of age), with a noble career behind him and a still more promising one in prospect The recoil of feeling thereafter fell with incalculable force on the assassin who, transferred from the Engineers' barracks, came before the commissary of police in the Borgo An artisan, Antonio Caieri by name, from the province of Ascoli-Piceno, he had been admitted four years ago into the Santo Spirito Hospital for tuberculosis which had unfitted him for manual labour All this time he was under treatment in the hospital, and though receiving every attention was notorious with the nurses, the porters, the clinical clerks and indeed the whole *personnel* as an ill-tempered violent, and ungraceful inmate His "indole perversa" (untoward disposition) had by Dr Bondi's orders led to his being segregated from the other patients and accommodated in the Sala Alessandrina till, at the end of May, he was sent out of hospital relieved but not cured From that day he never ceased to give trouble, hanging about the hospital, clamouring for readmission, saying he was starving, and constituting himself a nuisance One morning having gained access to Dr Bondi and preferred his usual demand he was told by the doctor that unless he came provided with an 'attestato municipale" it was against the rules of the hospital to readmit him Finding that his brutal threats and savage demeanour were of no avail he left vowing to take vengeance at the first opportunity He went to

Commons and the replies (reported in THE LANCET of April 1st, p 935) were in Sir Charles Cameron's opinion entirely unsatisfactory No doubt the true remedy for abuses of this kind is the passing of Mr Alexander Cross's Bill making Poor law medical officers in Scotland removeable only with the sanction of the Local Government Board of Scotland

June 20th.

IRELAND

(FROM OUR OWN CORRESPONDENTS)

The Weir Legacy to the Dublin Hospitals

THE arrangements for the distribution of Mr Weir's munificent legacy of £100,000 to the hospitals of Dublin have been followed with much interest here The three executors were directed by the terms of the will to advertise for claimants under it, and claims have been advanced by no less than 43 different hospitals and charitable institutions for a share in the donation The legal interpretation of the word "hospital" used in the will was open to question and it became necessary to obtain a decision from the Vice Chancellor on the matter That decision was promulgated on May 4th last and declared that 34 out of the 43 applicants were within the scope of the bounty Since that date four other institutions have been included from a batch of eight who sent in application quite recently and the money is now being divided among 38 hospitals of Dublin and its vicinity In February last £10 000 were given to 10 Dublin hospitals and charitable institutions in equal shares of £1000 The remaining £90 000 are now being distributed on the principles laid down by the Vice Chancellor and in portions settled at the discretion of the executors The precise sums to be allocated to each of the charities has not yet been made public, but the registrar of Mercer's Hospital has written to the morning papers of June 19th to acknowledge the receipt of £5000 from the executors, while the Governors of Dr Steevens Hospital have just publicly acknowledged the receipt of a like sum

The Legal Position of the Public Analysts to the County Councils in Ireland

At a meeting of the Limerick County Council held on June 17th a letter was read from Sir Charles Cameron protesting against the action of the county council in proposing to dispense with his services as public analyst, and stating that he was advised that dismissal from the office was equivalent to the abolition of the office He mentioned, moreover, that if the council decided on that course he was willing to retire on being paid £500 It was agreed to refer the matter to a committee, the council having been informed by the Local Government Board that they had no power to dispense with the services of the public analyst unless he himself wished to retire

The Finances of the Irish Branch Council

At the late meeting of the General Medical Council a discussion which is of the utmost interest to the medical profession in Ireland took place on June 8th on the finances of the Irish Branch Council It would appear that the assets of the Irish Branch Council have dropped from £801 18*s.* 5*d* in 1896 to £284 9*s* 10*d* in 1898, and it was only natural that the Irish representatives (all of whom reside in Dublin) should be asked by the President to explain how in two years there should be such an extraordinary drop in their receipts of £517 It would appear also that at one time the Irish Branch Council had as much as £1000 to its credit, now there is only a balance of £200 The explanation is that so many Irish students now go to Scotland for their degrees and qualifications, and as they register there the fees for such registration are lost to the Irish Branch Council Everyone admits these facts, the extraordinary thing is that when one looks at the names of candidates who pass the final examinations of the Scotch Colleges of Physicians and Surgeons (the "double qual," as students call it) it is evident that there is an exodus from all parts of the country The three largest medical schools in Ireland at present are Trinity, the Catholic University, and Belfast, and at the present time a large number of those students of the Catholic School of Medicine and of the Belfast Medical School who do not go to the Royal University of Ireland migrate to the qualifying boards in Scotland The same thing applies to Cork The curious point is that in Dublin there are, in addition to the two universities (Trinity and the Royal), the other medical qualifying bodies, the Royal College of Physicians of Ireland, the Royal College of Surgeons in Ireland, and the Apothecaries Hall of Ireland, and yet the great majority of Irish medical students at the present time who do not graduate at the Irish universities migrate to Scotland In the General Medical Council Sir Dyce Duckworth asked why such a large number of Irish students should go to Scotland to seek a diploma and Sir Christopher Nixon replied "The education is cheaper and the examinations are easier to pass"—a statement which was contradicted promptly by Dr McVail There can be no question that there is a great deal of truth in what Sir Christopher Nixon has stated, but thoughtful men must see that there are other elements to be considered What, for instance, is the reason why the number of Irish students going to Scotland has so largely increased in recent years? Have the Irish medical examinations suddenly become harder to pass and has education here become markedly dearer in the last two years? I think the time has come when all Irish medical men who are patriotic, and especially those who are engaged in the teaching of the coming race of medical men, should meet and discuss the question raised at the General Medical Council as to the reason why such a large number of young Irish medical students do not qualify in their own country but migrate to Scotland, and in fairness to all not merely the teachers but the students themselves should be asked the cause of this extraordinary exodus

A Case of Sporadic Cerebro-spinal Meningitis in Cork

A nursing sister who had been nursing a patient at Queenstown became very ill and was removed to Cork for treatment Two members of the profession in Cork saw her in consultation and found that she was suffering from cerebro spinal meningitis. Nearly the whole of her body was covered with black spots and within a very few days she succumbed to the disease The sanitary authorities were called in and fortunately no other case has since occurred Amongst the general public there was at first an idea that she may have contracted the disease in Queenstown where it may have been brought by a sailor from a foreign port, but inquiries have not elicited any information in confirmation of that opinion Besides, the fact that the disease is now generally regarded as not being directly contagious is rather against that theory

June 21st

PARIS

(FROM OUR OWN CORRESPONDENT)

The Case of Dr Lassallette

LAST year the police-court at Pau sentenced Dr Lassallette to two months' imprisonment for manslaughter (*homicide par imprudence*) He had performed an operation for the removal of a large fibroma from a woman named Treyeran residing in the commune of Coarrage She died a few hours afterwards and at the necropsy a pair of forceps which had been forgotten was found in the cavity of the uterus On the completion of his sentence Dr Lassallette made an application to the authorities declaring that Madame Treyeran died from poisoning by nux vomica and not from anything connected with the operation On the day of her death a bottle containing nux vomica was seized in the possession of a woman named Franck, a fortune teller of ill repute, who was convicted of illegal practice in medicine on the same day that Dr Lassallette was convicted of manslaughter As the statement in question seemed to have reference to M Treyeran, the husband of the deceased, he prosecuted Dr Lassallette before the police-court at Pau but the case was dismissed This decision was appealed against both by M Treyeran and by Dr Lassallette, the latter of whom claimed that his case should be reheard and the body of Madame Treyeran exhumed The court granted the application of Dr Lassallette and the matter now wears a different aspect

Banquet to Dr Emily

Dr Emily, the naval surgeon who accompanied Major Marchand's mission and through whose assiduous care the mission enjoyed excellent health during its painful experiences, has on his return been received in Paris with the utmost honour At the last sitting of the Academy of

Manual, second edition, by Antony Roche, M R C P Irel, Professor of Medical Jurisprudence and Hygiene in the Catholic University of Ireland, and "Heart Disease, with special reference to Prognosis and Treatment," third edition, by Sir William Broadbent, Bart M D, F R C P Lond F.R S, Physician in Ordinary to H.R H the Prince of Wales and John H H Broadbent M A., M D Oxon, M.R C S Eng, M R C P Lond—*The Physician*, a monthly journal of modern materia medica, pharmacology, and therapeutics, will be published in July, price 6d—Messrs Macmillan and Co announce for early publication in their list of Manuals of Medicine and Surgery a new volume on "Differential Diagnosis in Medicine," by Dr Frederick J Smith of the London Hospital The work is chiefly intended for senior students

ROYAL INSTITUTE OF PUBLIC HEALTH—The annual Congress will take place this year at Blackpool under the presidency of the Marquis of Lorne In connexion with the Congress there will be held from Sep 21st to Oct 14th an exhibition of appliances connected with public health, and special attention will be paid to a section including all appliances for the abatement of smoke There will also be a section devoted to public and private means of preventing fire, appliances for saving life from fire, displays of the St. John and Red Cross Ambulance work and fire brigade competitions Mr W G Larkins has been appointed curator and manager of the exhibition and may be communicated with at the Public Health Office Blackpool

WEST LONDON MEDICO-CHIRURGICAL SOCIETY—The Cavendish Lecture which appears in full at page 1699 was delivered before this society on June 16th by Professor William Osler The President and Council after the lecture entertained Professor Osler, Professor W S Halsted and the members of the society and their guests at a conversazione in the Town Hall Hammersmith, where some 250 persons were present During the evening two violin solos were well rendered by Dr Arthur Haydon, and a very successful demonstration of the value of the Roentgen rays in indicating the actual movements of the thoracic viscera was given There was also an exhibition of medical and surgical and hygienic appliances

DIPHTHERIA IN LONDON—The four-weekly period which ended on Saturday, May 20th ranks third of the five such periods of the current year as regards the amount of notified diphtheria recorded in the county of London The totals of the five periods since Jan 1 are 929, 957 791, 645 and 820 In the four weeks which ended on April 22nd the 645 notified cases yielded a weekly average of 161, and were distributed over all the sanitary areas of London save two In the fifth or May period there was a like distribution, but the weekly average was as high as 205 cases The manner of distribution however, differed in the two periods for whilst in the April period only one sanitary district had upwards of 50 recorded cases there were four such areas in the May period with an aggregate total of 235 cases or a little under 30 per cent. of the whole county Six districts in the May period had only 14 cases in all As regards mortality the May period had the smallest number of deaths from diphtheria of any of the five periods of the current year These numbers have been respectively 125 150, 166, 114 and 111. Thus the last two periods have produced almost identical totals with a weekly average of 23 deaths. In the May period the numbers or deaths have been 28 (11 below the corrected decennial average for the corresponding week of the years 1889-98), 21 (13 below such average) 40 (three in excess of the average) and 24 (14 below the average) weekly, the grand total of 111 contrasting with 146 as the aggregate of the four weekly averages had they obtained in place of the actual mortality The case mortality was 13 5 per cent in place of 17 7 in the preceding period In the Outer Circle there were 40 deaths in the May period, in contrast with 44 in the period preceding and 23 in the West Ham Registration District as compared with 19 in the April period. The several weekly totals were eight 14, 10, and eight, and in the West Ham District four nine, six, and four Thus this one area claimed more than half the total deaths from diphtheria in the circle of sanitary districts on the fringe of the metropolis The complete data for the succeeding four weeks, ended on Saturday last, June 17th, are not yet forthcoming but in so far as mortality from diphtheria is concerned they show in the aggregate but small variation from those for the May period as regards both the county of London and the Outer Circle Thus in the county of London the total number of deaths from the disease in this later June period was 110, while the sum of the decennial averages for the four weeks was 142 and in the Outer Circle the total was 45 deaths, of which West Ham registration area furnished a fraction short of half

Parliamentary Intelligence.

HOUSE OF COMMONS.

THURSDAY JUNE 15TH.

The Use of Hop Substitute

Mr CUTHBERT QUILTER asked the Chancellor of the Exchequer whether in conformity with the suggestion contained in the majority report and the recommendation contained in the minority report of the Beer Materials Committee, he would direct the Commissioners of Inland Revenue to require brewers for sale to make separate entry after the close of the present financial year, of all substitutes for hops used, describing accurately the nature of such substitutes and whether he would further direct the Commissioners to alter the form of the published return relating to brewers licences so as to disclose the quantities of malt, substitutes for malt, or unmalted grain, and of hops or substitutes for hops used by each individual brewer—Sir MICHAEL HICKS BEACH replied The majority of the committee while they mentioned that hops and hop substitutes might be made the subject of a separate entry expressed their opinion that no deleterious substitutes were in fact used, and that compulsory declaration of the use of substitutes would serve no useful end Legislation would be necessary to compel brewers to make such entries and in view of the committee's opinion I have not seen my way to propose it. The suggestion in the second paragraph was also considered by the committee but the opinion of the majority was that it would involve inquisitorial interference with business and a departure from that reticence as to individuals which is an essential feature of our revenue system.

FRIDAY JUNE 16TH.

Vaccination at Reading

Mr PALMER asked the President of the Local Government Board whether he was aware that the Reading Board of Guardians offered provisionally under the Vaccination Act, 1898, a scale of remuneration to the public vaccinator to extend over a period of six months, with the object of gathering from experience some idea of the actual amount of work involved under the new regulations and with the avowed intention as soon as this experience had been obtained, of revising such scale if found necessary so as to afford adequate remuneration to the officer such revised scale to have retrospective effect and why the Local Government Board overruled the proposals of the guardians and fixed upon a scale of remuneration in excess of that which the officer asked the guardians for and in the face of the assurance of the guardians that they were desirous of awarding adequate remuneration to their officer as soon as they were in a reasonable position to gauge the amount of work involved and the probable value of the services rendered—Mr CHAPLIN replied: The guardians of the Reading Union offered a scale of remuneration to the public vaccinator as stated in the question. He declined, however to accept the fee for successful vaccination which was offered on the ground that it was insufficient. No agreement having been come to between the guardians and the public vaccinator it devolved on the Local Government Board to determine the fees to be paid to him. The Board declined to raise the fees which the guardians had offered for successful vaccination and revaccination but as regards the remaining fee it appeared to them, having regard to the default in administering the Vaccination Acts in the union in the past, that unless a change took place in this respect the public vaccinator would not be adequately remunerated for the work which he is bound to perform if this fee was fixed at the minimum and they consequently increased it from 1s to 1s 6d. When the local circumstances which governed the Board's decision as regards this fee have altered the Board will be quite prepared to reconsider the matter

The Buttons of Recruits

Mr HAYDEN asked the Under Secretary for War whether a recruit joining at a regimental depot was put through a severe course of gymnastic and other training, chiefly in the open air for a period of three months and whether he was aware that the bread ration, one pound *per diem*, issued to him was regarded as altogether insufficient, and, having regard to the fact that the recently established "messing allowance" did not apply would he consider the advisability of establishing an increased bread ration for the recruit during this period. —Mr GEORGE WYNDHAM said that it was true that the "messing allowance" was not given to a recruit, but this only affected his pocket. He shared with his comrades in the additional messing which included extra bread. But in his case threepence was still stopped out of his pay

MONDAY JUNE 19TH.

The Vaccination Question.

Mr CHANNING asked the President of the Local Government Board whether his attention had been called to the proceedings against defaulters under the Vaccination Acts before the justices at Cirencester on June 5th whether he was aware that in a case against a defendant named Swinford the defendant produced a child in whom vaccination with glycerinated calf lymph was alleged to have been followed by terrible sores and that the summons was dismissed, and that on cross-examination the public vaccinator admitted that he had received many complaints from parents of similar injuries from the use of the new lymph whether the lymph used in these cases was obtained direct from the Local Government Board, and under what conditions and precautions it was issued and whether he would direct an inquiry into the complaints of these parents of the bad results of the new lymph.—Mr CHAPLIN said that this child was vaccinated with glycerinated calf lymph, that the vaccination took the ordinary course, and that the skin disease which broke out some time afterwards was

a blacksmith, purchased for a few sous the biggest nail he could find, choosing the rustiest one in order that the wound might be the more formidable, had it sharpened till it became a stiletto, and lay in wait for Dr Bondi He hung about the hospital all the next forenoon but missed his intended victim, and not till 4 15 P M of that day did he find the opportunity which he sought The rest we know. This is the second murder committed by a tuberculous patient in the same hospital—the previous victim being that Sister Agostina whose tragic death some few years ago sent a thrill of horror throughout the civilised world Her assassin, significantly enough—Romanelli by name—was (or rather is, for such "belve umane," or human wild beasts, are not executed in Italy) a personal friend of Caioni and his motive was the same—resentment at not having the resources of the hospital expended on him after the regulation time Such occurrences are so frequent in Italy as to call aloud for a punitive or deterrent system much more effective than that in force THE LANCET'S suggestion[1] of flogging is one which is seriously commending itself to the Italian reformer, there being nothing which such miscreants as Romanelli, or Caioni, or Luccheni dread more than physical pain The new laws of "Pubblica Sicurezza" now before the Legislature should certainly contain a provision of the kind, or at least one appealing more sensibly to the would be assassin than board and lodging for life at the expense of the industrious and law abiding citizens

Leo XIII and Dr Mazzoni

Grateful for the continued good health—nay, more, for the prolonged life—he owes to Dr Mazzoni's intervention four months ago, the Holy Father has just presented his portrait (of full length in oils) to that eminent surgeon, accompanying the gift with a special dedication couched in Latinity of characteristic eloquence Besides this token of "gratitude and esteem" His Holiness in an autograph letter (also in the language of his Church) has just nominated Dr Mazzoni "Surgeon in chief to the Apostolic person"

June 19th.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND—The following gentlemen having passed the necessary examinations and having conformed to the By laws and Regulations, have been admitted Fellows of the College and have received their diplomas —

Frederick William Robinson, M D C M. Aberd Aberdeen University, Charing Cross and Guy's Hospital, Diploma of Member dated August 4th, 1887 Fergus Menteith Ogilvie M.D, B C Cantab., L.R.C P Lond. Cambridge University and St. George's Hospital, Member July 29th 1888 Arthur Gaskell (Surgeon R.N) L.R.C P Lond., University College Hospital, Member August 1st, 1892 William Charrington Wood M.D Lond., L.R.C P Lond. St Mary's Hospital Member Feb 8th 1894 Frederick Neafield Cookson M.D Lond. L.R.C P Lond., Middlesex Hospital, Member May 10th, 1894 Herbert Johann Scharlieb, M D, B S Lond, L.R.C.P Lond, University College Hospital, Member July 30th, 1894 Stanley Copley L.R.C P Lond., Guy's Hospital, Member Nov 8th, 1894 Felix Bolton Carter M.D Lond., L.R.C P Lond, University College Hospital Member July 29th, 1895 Frederick Riley M.B. B S Lond. L.R.C P Lond. Westminster Hospital, Member July 29th, 1895 Alfred William Sanders, M.D Lond., L.R.C P Lond., St. Mary's Hospital, Member July 29th, 1895 Archibald Robert John Douglas M.B. B S. Lond. L.R.C.P Lond. St. Bartholomew's Hospital, Member May 14th, 1896, Angelo Mattes Crabtree, L.R C P Lond., St. Bartholomew's Hospital, Member August 4th, 1896 John Thomas Heweteon M.B., C M. Edin. L.R.C.P Lond, Edinburgh University King's College, and St. Bartholomew's Hospital, Member August 4th, 1896 Alexander Benjamin Tucker M.B Lond L.R.C P Lond., St. Bartholomew's Hospital Member August 4th, 1896 Sidney Herbert Berry, M.B. Lond., L.R.C P Lond., St. Bartholomew's and Charing cross Hospital, Member Feb. 11th, 1897 Edward Joseph Fox, B.Sc. Lond. L.R.C P Lond Owens College and Royal Infirmary, Manchester, and St. Bartholomew's Hospital, Member Feb 11th, 1897 William Joshua Harding, M.B Lond. L.R.C P Lond., St. Bartholomew's and Westminster Hospital, Member Feb 11th, 1897, George Trustram Watson, M.A M.B. and B C Camb. L.R C.P Lond St. George's Hospital, Member Feb. 11th, 1897 John James Evans, M.B. C M Edin., L.R.C P Lond., Edinburgh University, Mason College and General Infirmary, Birmingham, Member May 13th 1897, Henry Simpson Newland M.B Ch B Adel. L.R C P Lond. Adelaide University and London Hospital Member July 29th 1897 Maurice Vincent Dee, M.B C M., L.R.C P Lond., Edinburgh University, King's College and St. Mary's Hospital Member Feb 10th, 1898 James Battersby L R.C P Lond. St Mungo's College and Royal Infirmary Glasgow Member May 4th, 1898 Peter Lewis Daniel, L.R.C P Lond. Charing Cross Hospital, Member May 4th, 1898 Henry Thomas Hadley Williams, M.D Lond. Canada, L.R C.P Lond. Western University Ontario, and St. Bartholomew's Hospital, Member August 2nd, 1898, Bland Stokes Whitley, M.D Dub. M R.C P Lond. Trinity College, Royal College of Surgeons, and Richmond Hospital Dublin, and St. George's Hospital, not previously a Member

Two other gentlemen passed the examination, but not having attained the legal age, will receive their diplomas at future meetings of the Council. 22 gentlemen were referred for six months and one for one year

THE last of the series of three concerts in aid of the funds of University College Hospital was held in the Botanical Theatre, University College, on June 16th, before a crowded and fashionable audience

MR T BOWHILL, F R C V S, has resigned his position as Bacteriologist to the Glamorgan County Council The appointment of his successor will be left to a joint committee of the Cardiff Corporation and the Glamorgan County Council

THE CHEMISTS' EXHIBITION—The fact that this exhibition which is now held annually can only find proper accommodation in the Agricultural Hall, Islington, is some evidence of its increasing popularity and success The Board of Trade further recognise the exhibition as an international one This year's event was signalised this week, the exhibition being opened on June 19th and closed on June 23rd So far as can be gathered the attendance was a satisfactory one There was everything on view to engage the attention of the visiting pharmacist, and this annual show should be useful to him in affording him an insight into recent developments and the direction which during the past year progress in pharmacy has taken Pharmaceutical exhibits afford abundant material for artistic display and the exhibitors on the present occasion took every opportunity to make the exhibition attractive Most of the leading houses in the drug trade were represented, the subjects of display being almost entirely confined to pharmacy and accessories of pharmacy An excellent programme of music was provided by the Ladies' Pompadour Band and demonstrations of liquid air, modern photography, and telephotography helped to make up an attractive programme This annual exhibition appears to supply a distinct want and the organisers—the proprietors of the *British and Colonial Druggist*—may be congratulated on the success which has met their enterprising efforts

LITERARY INTELLIGENCE—The following is a list of new books and new editions to be published by Messrs Baillière, Tindall, and Cox "Difficult Digestion due to Displacements," by A. Symons Eccles, M.B, C M Aberd ex President of the West London Medico-Chirurgical Society, "Artistic Anatomy of the Horse," with 20 original plates, by H W Armstead, M D, B S Lond. F R C S Eng, "Food Standards, with Statistics of Adulteration," by C H. Cribb, B Sc., F I C, and C G Moor M A., F I C, "Dictionary of Medical Terms" (Part II, French-English), by H De Meric, M R C S Eng, Surgeon to the French Hospital and Dispensary, "Aids to Materia Medica" (Part III), by William Murrell, M D Brux, F R C P Lond, M R C S Eng, Physician to, and Lecturer on Pharmacology and Therapeutics at, Westminster Hospital, "Urinary Analysis and Diagnosis by Microscopical and Chemical Examination," with 108 original illustrations, by Louis Heitzmann, M D, "The Roentgen Rays in Medical Work," second edition, revised and enlarged, by David Walsh, M D. Edin, Physician to the Western Skin Hospital, Honorary Secretary, Roentgen Society, London, "Roentgen Ray Case-book," by the same author, "Dental Surgery," fourth edition, by H Sewill, M R C S Eng, L D S, "Hand book of Surgical Pathology," third edition, by W J Walsham, M B, C M Aberd., F R C S Eng, Surgeon to, and Lecturer on Surgery at, St. Bartholomew's Hospital, Member of the Court of Examiners of the Royal College of Surgeons, "The Principles and Practice of Veterinary Surgery," ninth edition, by W Williams, F R C V S, F R S E, Principal and Professor of Veterinary Medicine and Surgery at the New Veterinary College, Edinburgh, "Practical Guide to the Public Health Acts and Correlated Acts for Officers of Health and Inspectors of Nuisances," second edition, by T Whiteside Hime, B.A. M.D Dub, late Medical Officer of Health of Sheffield and Bradford, "A Manual of Surgery," second edition, by Wm Rose, M B, B S Lond, F R C S Eng, Professor of Clinical Surgery in King's College, London, and Albert Carless, M B., M S Lond, F R C S Eng, Teacher of Operative Surgery in King's College, London, Imperial Health

[1] THE LANCET, Dec. 10th, 1898, p. 1564

MANCHESTER ROYAL INFIRMARY—Resident Surgical Officer for twelve months, unmarried. Salary £60 per annum, with board and residence.

MASON UNIVERSITY COLLEGE, Birmingham (with Queen's Faculty of Medicine).—Professorship of Physiology.

NEW HOSPITAL FOR WOMEN, 144 Euston-road, London.—Medical Woman as Clinical Assistant to the Out-patient Department for one year.

NORTH WEST LONDON HOSPITAL, Kentish Town-road.—Assistant Resident Medical Officer. Salary at the rate of £60 per annum.

OLDHAM INFIRMARY.—Senior House Surgeon. Salary £60 per annum. Also Junior House Surgeon. Salary £70 per annum, with board, washing, and residence in each case. Apartments for one year.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Stipend £150 per annum, rising to £200.

PARISH OF LOCHGOILHEAD AND KILMORICH.—Medical Officer to attend the poor of the parish. Salary £60 per annum. Apply to the Inspector of Poor, Lochgoilhead.

ROCHDALE INFIRMARY AND DISPENSARY.—House Surgeon, unmarried. Salary £50 per annum, with board and residence.

ROYAL BERKS HOSPITAL, Reading.—Assistant House Surgeon for six months. Salary £50 per annum, with board, lodging, and washing.

ROYAL CORNWALL INFIRMARY, Truro.—House Surgeon, unmarried. Salary £120, with furnished apartments, fire, lights, and attendance.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London.—House Physician for six months. Salary at the rate of £40 per annum, with furnished apartments, board, and washing.

ROYAL PORTSMOUTH HOSPITAL.—Assistant House Surgeon. Salary £60 per annum, with board, lodging, &c.

SEAMEN'S HOSPITAL SOCIETY, Greenwich, S.E.—Physician to In-patients and a Physician to Out-patients at the Branch Hospital in the Royal Victoria and Albert Docks, E.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—House Surgeon for two years. Salary £100 per annum, with board, lodging, and washing. Also Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing.

STOCKTON AND THORNABY HOSPITAL, Stockton-on-Tees.—House Surgeon non-resident. Salary £200 per annum.

ST. BARTHOLOMEW'S HOSPITAL MEDICAL SCHOOL, London, E.C.—Assistant Demonstrator of Chemistry.

ST. MARYLEBONE GENERAL DISPENSARY, 77 Welbeck-street, London, W.—Ophthalmic Surgeon.

TOTTENHAM HOSPITAL.—Junior House Surgeon for six or twelve months. Honorarium at the rate of £50 per annum given, with board, residence, and laundry.

UNIVERSITY COLLEGE, Bristol.—Professorship of Physiology.

WEST BROMWICH DISTRICT HOSPITAL.—Resident Assistant House Surgeon. Salary £50 per annum, with board, lodging, washing, and attendance.

WEST END HOSPITAL FOR NERVOUS DISEASES, Welbeck-street, London.—Medical Registrar for six months (non-resident). Honorarium, 25 guineas.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Assistant House Surgeon for six months. Honorarium at the rate of £50 per annum, and board, lodging, and washing.

Births, Marriages, and Deaths.

BIRTHS

CANTLIE.—On June 16th, at Devonshire-street, Portland-place, London, W., the wife of James Cantlie, M.B., F.R.C.S., of a son.

WAINEWRIGHT.—On June 15th, at 42, Wickham-road, Beckenham, Kent, the wife of Robert S. Wainewright, M.D. Lond., of a daughter.

YOUNG.—On June 14th, at Clapham-road, Canonbury, N., the wife of L. Unwin Young, M.B., C.M., of a daughter.

MARRIAGES

GIBSON—PETTIGREW.—On June 10th, at St. Peter's, Cromer-gardens, South Kensington, London, by the Rev. F. E. Bridgeman, D.D., vicar, E. Arthur Gibson, M.D., Glasgow, to Ellen Shaw, daughter of the late William Pettigrew, of Glasgow and Chislehurst.

GONIN—WILLETT.—On June 22nd, 1899, at St. Mark's Church, Brighton, by the Reverend Henry Newton, M.A., and the Reverend Alexander Morgan, M.A., vicar of the parish, Edmund Henri Gonin, M.D., of Towcester, Northamptonshire, eldest son of the late Reverend Pasteur Gonin and of Mrs. Gonin, of Liverpool Gardens, Worthing, to Mildred Theyre Willett, younger daughter of George Walker Willett, J.P., D.L., of West House, Brighton.

NAIRN—BUSSELL.—On April 8th, 1899, at St. Luke's Harbour, North New Zealand, by Rev. Canon S. Hill, Robert Nairn, F.R.C.S., of Hastings, to Mary Cecil, eldest daughter of Captain W. R. Bussell, of Flixmere.

SQUIBBS—CROWE.—On June 10th, at the parish church, Lenton, Nottingham, Robert Edward Portbury Squibbs, M.R.C.S. Eng., L.R.C.P. Lond., of 15, Church-street, New Lenton, Nottingham, to Edith Mary Cranmer Crowe, of Great Massingham, near Kings Lynn.

DEATHS

LANE.—On June 17th, at Gloucester-street, S.W., William Ralph Lane, Deputy-Surgeon-General, late Brigade of Guards, aged 65 years.

SLATER.—On June 14th, at Northampton Hospital, Leonard Slater, M.A., M.B., of Osman House, Fortis-green, London, in his 31st year.

N.B.—A fee of 5s. is charged for the insertion of notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

THE LABOURER IS WORTHY OF HIS HIRE.

MR. G. F. ROUMIEU, the coroner for West Surrey, held an inquest at Compton recently when evidence was given before him of an interesting character to medical men, particularly to medical men in the country where long distances have to be traversed.

The inquest was necessitated by the somewhat sudden death of a woman aged 50 years. The husband of the deceased stated, according to the account of the proceedings given in the *Surrey Advertiser* of June 17th, that his wife was taken ill early in the morning before he went to work. He left the house at 6.30 and she was not then worse than she had been many times before. He told his son to let him know if anything happened and at four o'clock on the same afternoon he was fetched home. He found his wife in bed and she said that she was very ill. She died suddenly at 8.30 P.M. The sister of the deceased said that she went to the house on the day of the death and found the deceased very ill. She sent the son for a medical man but he could not get one. Another witness said that she was called to the deceased at 8.30 P.M. and found her unconscious and fast dying. Witness remained till she died. A son of the deceased said that he went to a medical man and requested him to come to see his mother. The medical man asked if he had attended the woman before and witness told him that he thought he had attended her some time ago. The medical man asked him if any one else had been attending her and he said that he thought that "another doctor had left her have a bottle of medicine." The first practitioner then told him to go to the second. He went to the second medical man who refused to attend, as on a previous occasion he had not been paid for his work. Upon hearing this evidence the coroner with praiseworthy common sense cut away the ground from the feet of the ungenerous people who usually found upon this not unusual situation accusations of brutality and callousness against the medical profession. "I am not at all surprised," said the coroner. "If you owe a doctor money I do not see why he should come any more than anyone else. If you owed a butcher money for a leg of mutton he would not let you have another, would he?"

The jury in this case returned a verdict in accordance with the medical evidence—viz., that death was due to syncope following pulmonary cardiac and hepatic disease. We congratulate them upon their fairness. As a rule on the occasions when we have to record the case of an inquest where medical attendance has not been forthcoming a rider has been attached to the verdict accusing some medical man of gross inhumanity. We have protested frequently against this proceeding and hope that the line taken by the coroner at Compton—not a medical coroner be it remembered—will lead the public and particularly the lay press, to consider the cruelty of abusing a medical man and holding him up to odium because he wants to be paid for his onerous services. In a matter of real urgency it is almost unknown for a medical man to refuse attendance. Although a large proportion of a medical man's practice is always unpaid and although no inconsiderable section of the medical profession, oppressed by medical aid associations, do their work for beggarly fees, yet when it is made clear to the medical man that his presence is needed at once to stand between death and a fellow creature he goes. He does not think of his fee—he goes. But when the imminence of the situation is not made clear he does not necessarily attend the case without a fee. It is not only unfair to expect the reverse, but—and this is the point upon which we desire to lay emphasis—it is unfair to those of the community who do pay him that he should be at the beck and call of those who do not. A medical man has rarely any spare time and every extra visit made means a visit the less in some other direction. All coroners are not as quick as Mr. Roumieu was on this occasion to point out to the jury the proper position of the medical man in the circumstances under consideration. When a witness at an inquest tells of a cruel doctor who would not come to the deceased until his fee was paid we wish that the coroner would make a point of examining into the story closely. He would almost invariably find that the serious nature of the case had not been made clear to the medical man. But as a rule this does not happen. Usually the evidence of the witness is listened to with indignation by the public who say "Shame" and by the jury who, unguided by the coroner, let sentiment influence their right judgment and a rider is attached to the verdict holding up the medical man to the contempt of his neighbours. Medical men we repeat do more unpaid work in this world than any class and as much badly paid work. It is therefore incumbent upon the community to see that they get fair play and are not made the victims of stupid misrepresentation.

"A HARD CASE."

To the Editors of THE LANCET.

SIRS,—Mr. A. J. Winter has if anything underestimated the hardness of this case rather than otherwise. I have been acquainted with the Raven family for over 20 years and am familiar with the compact

not at all connected with the vaccination but was an ordinary infantile skin disease which frequently occurred without vaccination at all. The calf lymph in this case was received from the Local Government Board Department after it had undergone the usual test. The calf from which it was taken was thorougly sound and the test showed the usual result, that there was no infectious matter in it. He had received the reports of 339 vaccination officers dealing with over 3000 cases where this glycerinated calf lymph had been used and they were all entirely satisfactory The public vaccinator did not state what was alleged against him in the question but another gentleman who was called in did make such a statement In these circumstances he did not intend to make any inquiry

TUESDAY JUNE 20TH.

Inoculation in India.

Sir CHARLES CAMERON asked, the Secretary of State for India whether he could lay upon the table of the House any official reports on the results of inoculation in India against cholera, typhoid and the plague.—Lord GEORGE HAMILTON: The hon Member is aware that a Commission has for some time past been investigating the whole question of the plague in India, including that of the various forms of inoculation I hope that their report may shortly be ready for publication and I should be disposed to await it before presenting any other papers on the subject to which the hon. Member's question refers. I should add that as regards inoculation against typhoid fever no official reports are as yet available —Sir CHARLES CAMERON What about inoculation against cholera?—Lord GEORGE HAMILTON There are certain papers, but I think it will be better to await the report of this Commission and then I shall endeavour to distribute as much information as I can.

WEDNESDAY JUNE 21ST

Inebriates Act (1898) Amendment Bill.

An attempt was made to get the second reading of this Bill but failed, a member talking out" the Bill.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor not later than 9 o clock on the Thursday morning of each week, for publication in the next number*

BENNETT W E F R C S Eng, has been appointed Honorary Surgeon to the Royal Orthopædic and Spinal Hospital, vice Charles Warden, retired.

BENNETT W G L.R.C P Lond M.R.C S, has been appointed Medical Officer to the Worcester Dispensary and Provident Institution.

BOASE, R. D, L.R.C P Lond. M.R.C S, has been appointed Medical Officer by the Penzance Port Sanitary Authority

BOYER, L M.B Ch B Edin. has been appointed Assistant Medical Officer at the Infirmary of the Parish of Birmingham.

DASHWOOD C E L.R C P Lond. M.R.C S has been appointed Medical Officer for the Somerby Sanitary District of the Melton Mowbray Union

DAVIES, W N M D, M.Ch Irel. has been appointed Medical Officer for the Llanharran Sanitary District.

DREW DOUGLAS M.D B S., F R.C S.Eng., has been appointed Surgeon to the North Eastern Hospital for Children Hackney vice H P Dean, resigned.

FORSTER E., M.A. has been appointed House Governor and Secretary to the Wolverhampton and Staffordshire General Hospital.

GATENBY G M B Ch B. Edin., has been appointed Assistant Medical Officer at the Waterloo-road Workhouse of the Parish of St Matthew Bethnal Green.

GAYLOR, E. L.R.C P Edin., L.F P S. Glasg., has been re-appointed Medical Officer by the Ripley Urban District and Parish Councils.

HALL, GEO M.D, C M. Edin. has been re-appointed Medical Officer of Health by the Hambledon Rural District Council.

HESSEY J D L.R.C.P Lond. M.R.C S has been appointed Medical Officer for the Cottage Homes of the Hastings Union.

HOLLINGS C E., L.R.C P L.R C S Edin., L F P S Glasg. has been appointed Medical Officer for the Weaverthorpe Sanitary District of the Driffield Union.

HUGGINS SYDNEY P M B., Lond. M.R.C S. L.R.C P., has been appointed an Honorary Medical Officer to the Holloway and North Islington Dispensary

JENKINS CHARLES CAMPBELL, L.R.C P L R.C S. Edin. L.F P S Glasg, has been appointed Assistant Medical Officer at the Cardill Workhouse, vice Mr Davies, resigned

KNIGHT HENRY ERNEST M.D Lond., M.R.C S. L.R.C.P Lond., has been appointed Honorary Surgeon to the Rotherham Hospital and Dispensary

KNOWLES, BEATRICE, M.B. B.S Lond. has been appointed Second Assistant Medical Officer at the Waterloo-road Workhouse by the Bethnal Green Board of Guardians.

LANGLEY A. F L.R.C P, L.R.C.S Edin., L.F P S Glasg has been appointed Medical Officer for the Fourth Sanitary District of the Wimborne and Cranborne Union and for the Fifth District of the Blandford Union respectively

LANSDOWN C E. L.R.C P Lond. M R C S., has been appointed Deputy Medical Officer by the Cheltenham Board of Guardians.

LAWRENCE, A. G M.D St And. M.R.C S has been appointed Medical Officer for the Shirenewton Sanitary District of the Chepstow Union.

MCDOUGALL, A. H. L.R.C P Lond., M R C S. has been appointed Medical Officer for the Third (A) Fourth, and Fifth Sanitary Districts of the Parish of Birmingham.

MONTGOMERY W P M.A. Oxon. B.S and M.B Lond. F R C S Eng, has been appointed Visiting Surgeon to the Manchester Workhouse Infirmary

MORRISON J T J M.A. M.B Cantab. F R.C S Eng has been appointed Professor of Forensic Medicine in the Mason University College Birmingham, vice R. M. Simon.

ORR, VIVIAN B. M.B., B.S. Melb. has been appointed Assistant Surgeon to the Cancer Hospital (Free), Brompton, London.

REID ARTHUR G B.Sc. Lond, M.B., C.M. Edin., has been appointed Honorary Surgeon to the Rotherham Hospital.

SCHAFER E. A. LL.D Aberd. M R.C S, F R.S., has been appointed to the Chair of Physiology, Edinburgh University, vice the Professor Rutherford

WALLIS C H., M.R.C S., L R C P L.D.S has been appointed Assistant Dental Surgeon at King s College Hospital London

WHEATLEY A. J M.D C M. Edin. has been appointed Medical Officer for the Seventh Sanitary District of Bradford (Yorks) Union.

WHITEHEAD A L M B. B.S Lond. M R.C.S., L.R.C P., has been appointed Assistant Surgeon to the Eye and Ear Department of the General Infirmary at Leeds.

WILSON J H M.D B S Durh., has been appointed Medical Officer of Health for the Wigan Rural Sanitary District, vice R. S P. resigned

YOUNG J M., M B Ch.M Aberd. has been appointed Ophthalmic Surgeon at the Birmingham Children s Hospital.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index)

ANCOATS HOSPITAL, Manchester —Resident Junior House Surgeon Salary £50 with board and washing —Also Resident Senior Surgeon Salary £80 with board and washing.

BERRYWOOD ASYLUM Northampton.—Assistant Medical Officer for years, unmarried Salary £150, increasing to £200 with lodging washing, and attendance.

BETHLEM HOSPITAL, Bridewell Hospital New Bridge-street, London Two Resident House Physicians for six months apartments plete board and washing provided. Honorarium at the r £12 12s. each per quarter will be paid.

BIRKENHEAD BOROUGH HOSPITAL.—Honorary Surgeon.

BIRKENHEAD UNION —Assistant Medical Officer for the Infir Workhouse and Schools. Salary £80 per annum, with washing and apartments. No extra fees.—Applications to the to the Guardians, 45, Hamilton square Birkenhead.

BOROUGH HOSPITAL, Birkenhead.—Visiting House Surgeon. Sala per annum, with board lodging, and washing (no stimulants).

BOROUGH OF BURTON UPON TRENT —Medical Officer of Health District of the Borough Salary at the rate of £350 per an exclusive of authorised disbursements payable quarterly —Ap tions to the Town Clerk, Burton upon Trent.

BRADFORD POOR LAW UNION —Two Resident Assistant Medical Of for the Hospitals and Workhouse of the Union. Salary of £125 and of Junior £100, with prescribed rations, apartment washing unmarried. Appointments for one year Applicati the Clerk to the Guardians, 22, Manor row Bradford.

BRADFORD ROYAL INFIRMARY —Junior House Surgeon, unma Salary £50 per annum with board and residence.

BRIGHTON THROAT AND EAR HOSPITAL Church-street Queen s-r Non resident House Surgeon for six months Salary at the r £75 per annum. Apply to the Secretary 10 Black Lion-s Brighton.

CANCER HOSPITAL (FREE), Brompton, S W —Two Honorary Ass Surgeons.

CARDIFF INFIRMARY —Honorary Pathologist.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn road, W House Surgeon Board and residence provided in the Hos

COUNTY ASYLUM, Gloucester —Third Assistant Medical Officer married Salary £105 per annum, with board (no stimul lodgings and washing

COUNTY ASYLUM, Prestwich, Manchester —Junior Assistant M Officer unmarried. Salary commences at £125 per annum, in ing to £250 by successive increments of £25, with apartm board attendance, and washing

COUNTY ASYLUM, Whittingham, Lancashire —Locum Tenens for four or five months. Salary two guineas a week

DERBYSHIRE ROYAL INFIRMARY Derby —Honorary Surgeon

ESSEX AND COLCHESTER HOSPITAL, Colchester —House Surgeon. S £100 per annum, with board washing and residence.

EVELINA HOSPITAL FOR SICK CHILDREN Southwark S.E.—Ju Resident Medical Officer and Registrar. Salary £50, with b and washing

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERS EYE INSTITUTION, Gloucester —Physician

GLASGOW CORPORATION —Bacteriologist in connexion with the H Department of the City Salary at the rate of £350 per annu Applications to Clerk to the Corporation (Police Departm Glasgow

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N —D Surgeon

GREENOCK INFIRMARY —House Surgeon Salary £60 per annum, board and residence in the house

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompt Resident House Physicians. Also Assistant Resident Me Officer Salary £50 per annum, with board and residence.

HOSPITAL FOR SICK CHILDREN Great Ormond street, Bloomsbu London.—House Surgeon for six months unmarried. Salary with board and residence in the hospital. Also House Physician six months. Unmarried. Salary £20 with board and resid in the hospital.

KING S COLLEGE, London.—Assistant Physician in charge of patient Children s Department at King s College Hospital. S

LIVERPOOL NORTHERN HOSPITAL.—Assistant House Surgeon £70 per annum with residence and maintenance in the House.

MANCHESTER CHILDREN S HOSPITAL, Gartside-street Manchest Medical Officer for the Dispensary Salary £160 per annum.

"RHŒAL ARTHRITIS TREATED BY INCISION AND IRRIGATION."

ence to an annotation published in THE LANCET of April 11th, page 82, in which we referred to a case reported in the *London Medical and Surgical Journal* of gonorrhœal arthritis treated by ion and irrigation, we have received a letter from Dr John Conor senior medical officer British Hospital, Buenos Ayres ting out that more than a year previously he had published in *Medical Standard* in the *Annals of Surgery* and in the *Medical* and Circular accounts of similar cases

panum.—1. The wording on the door plate is a matter of taste but young practitioner in a new locality would not be wise to assume publicly the position of a specialist unless he has claims in the y of past work that must seem satisfactory to his medical leagues. 2. The course is optional. It is well for the new-comer ask the opinion of a resident of long standing what is the custom the neighbourhood.

Sir Lee will find that both medical and public attention has en recently drawn to the danger and dirtiness of the trailing skirt

METEOROLOGICAL READINGS

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 22nd, 1899.

	Barometer reduced to Sea Level and 32° F	Direction of Wind	Rainfall	Solar Radiation in Vacuo	Maxim. Temp. Shade	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
16	30·00	E.	...	113	79	53	55	62	Hazy
17	30·02	E.	...	109	79	62	57	62	Fine
18	29·97	S.W	...	115	76	57	60	63	Cloudy
19	29·65	N.W	0·10	108	73	54	54	59	Cloudy
20	29·35	S.W	0·23	107	72	59	61	62	Raining
21	29·39	S.	...	120	78	53	59	63	Cloudy
22	29·02	N.E.	...	80	66	61	61	60	Overcast

Medical Diary for the ensuing Week.

OPERATIONS

METROPOLITAN HOSPITALS.

NDAY (25th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

ESDAY (27th).—London (2 P.M.) St. Bartholomew's (1.30 P.M.) Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.) Cancer (2 P.M.), Metropolitan (2.30 P.M.), City Orthopædic (4 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

DNESDAY (28th).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.) St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.) Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.) Cancer (2 P.M.).

URSDAY (29th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), West London (2.30 P.M.), St. Mark's (2 P.M.).

IDAY (30th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.) King's College (2 P.M.) St. Mary's (2 P.M. Ophthalmic 10 A.M.), Cancer (2 P.M.) Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

TURDAY (1st).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.) London (2 P.M.), University College (9.15 P.M.) Charing-cross (3 P.M.), St. George's (1 P.M.) St. Mary's (10 P.M.) London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.) the Royal London Ophthalmic A.M.), the Royal Westminster Ophthalmic (1.30 P.M.) and the ntral London Ophthalmic Hospitals operations are performed daily

SOCIETIES

EDNESDAY (28th).—DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND (20, Hanover-square, W.).—8.30 P.M. Informal Exhibition of Cases. 5 P.M. Ordinary Meeting.

LECTURES, ADDRESSES, DEMONSTRATIONS &c.

ONDAY (26th).—WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr J. B. Ball: The Symptoms of Throat and Nose Affections.

UESDAY (27th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr Risien Russell: Combined Degenerations of the Spinal Cord (lantern demonstrations).

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM (73, Welbeck street W.).—4 P.M. Mr Cantlie: The Surgery of the Nerves.

WEDNESDAY (28th).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr Habershon: The Diagnosis of Pneumothorax.

ST JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr T. D. Savill: Exfoliative Dermatitis. (Post-graduate Course.)

MEDICAL GRADUATES COLLEGE (22, Chenies-street).—6 P.M. Dr H. Tilley: Demonstration of Selected Cases (Throat and Nose).

THURSDAY (29th).—CENTRAL LONDON THROAT NOSE, AND EAR HOSPITAL (Gray's Inn road, W.C.).—5 P.M. Dr D. Grant: Diagnosis and Treatment of Visible Abnormalities of the Auricle and Meatus.

CHARING-CROSS HOSPITAL.—4 P.M. Dr Willcocks: Demonstration of Medical Cases. (Post-Graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond street, W.C.).—4 P.M. Dr Collier: Treatment of Intussusception in Young Children.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr W. A. Turner: Demonstration of Nervous Diseases.

FRIDAY (30th).—GLASGOW UNIVERSITY CLUB, LONDON.—7 P.M. Dinner at Trocadero Restaurant. Lord Kelvin will preside.

EDITORIAL NOTICES.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES

THE INDEX TO THE LANCET.

THE Index and Title-page to Vol. I. of 1899 which is completed with the issue of to-day, will be given in the next number of THE LANCET.

VOLUMES AND CASES.

VOLUMES for the first half of the year 1899 will be ready shortly. Bound in cloth, gilt lettered price 18s., carriage extra.

Cases for binding the half G P s now ready
Cloth gilt lettered, price 2s. rchfont ncompanied
To be obtained on applic ingham C.
by remittance. iverpool
Mer-

During the week marked copies of the following newspapers have been received: *East Anglian Daily Times, Birmingham Daily Post, Birmingham Daily Gazette, Bradford Observer, Hull News, York Daily Herald, Lincoln Leader, Hereford Times, Dundee Advertiser, Sheffield Daily Telegraph, Glasgow Herald, Leicester Daily Post, South Durham Mercury, Sussex Daily News, Manchester Guardian, Cornish Telegraph, Times of India, Pioneer Mail, Architect, Citizen, Scotsman, Builder, Newry Telegraph, Nottingham Guardian, Macclesfield Courier, Brighton Gazette, Sanitary Record, Reading Mercury, Bradford Daily Telegraph, Mining Journal, City Press, Toronto Daily Mail, Liverpool Daily Post, Bristol Mercury, Weekly Free Press and Aberdeen Herald, Yorkshire Post, Leeds Mercury, Hertfordshire Mercury, Local Government Chronicle, Fur and Feather, Loughborough Examiner, Morning Advertiser, Chemist and Druggist, Isle of Wight Mercury, Surrey Comet, Rainham Herald, Meat Trades Journal, Public Opinion, Llandudno Directory, Surrey Advertiser, Local Government Journal, Kalgoorlie Miner, Hove Gazette, Middlesex County Times, Wiltshire Telegraph, Prestwich and Whitefield Guardian, &c., &c.*

he made with his successor when he succeeded to the excellent practice, 13 years ago which had been in the Raven family for, I believe a century A more genial and honourable gentleman than Mr Henry Raven could not exist and the way his successor disposed of the practice and subsequently failed to pay the annuity under circumstances familiar to me are not conducive to an old practitioner transferring his practice to a young man under similar circumstances. Endowed with the feelings of a gentleman and punctilious to a degree on all points of professional etiquette he unfortunately placed too great confidence in the arrangement with his successor And I do most earnestly lend my support to Mr Winter's attempt to raise a liberal fund for this old couple the more so as Mr Raven has two sisters living, both over 80 years of age whose only means now they are past farming a small holding is dependent on a charge which Mr Raven has had to meet, so that it is not too much to say that the action of his successor has jeopardised the existence of Mr and Mrs. Raven and his two old sisters—the elder one being the exact age of our beloved Queen.

I am sending my mite towards this real object of charity to Mr Winter and beseech all members of the profession to do likewise. I can vouch for the facts of the case, with which I was made familiar at the time consequent on my acquaintance with the family

I remain, Sirs, yours faithfully,

ELLIOT DAUNT,

June 17th 1899 Physician and Surgeon

A RURAL PARISH DOCTOR.

I m a country parish doctor with about enough of pay
Just to give myself a dinner when my horse has had his hay
And I must go on a working for the pittance that I get
There s such awful competition, such a lot of human sweat
Though I often thought twere better if I dropped the weary load
And just stepped into the pasture from the grinding of the road
For I'm almost as familiar with the moon as with the sun,
For my work is often hardest when all others work is done
And when each man of labour is fast sleeping in his bed
I must shift a weary body try to clear a weary head
It s no matter if the storm carries on its wings the snow,
And the heavy clouds of winter shroud in darkness all below,
And the way lies o er the moorland where you can ly miss the track,
I must carry out the order or they'll jump upon my back.
So it s saddle up and face it, though before I m back the night
May have given place to morning, with its raw and chilly light,
When you find your back has shivers and your feet and hands are numb,
And the feelings of exhaustion o er your drooping spirits come
For it's not like serving Uncle when you're 'neath the parish rule,
Any man who thinks it is so—well he s thinking like a fool
And I wish he had the guardians to contend with if he broke
Through a trifling regulation then he d find it was no joke,
For they d buzz around and sting him as the gadfly stings the horse
When you see him in the pastures hold a wild distracted course,
For it is a rule I've noticed, in the ways of things below
That the fiercest ones in nature are the meanest of the show,
And a little brief authority if ignorance has got
Makes it just about the fiercest and the meanest of the lot
Oh, that I d enough of practice in a private sort of way
To enable me to parish work to bid a long 'Good day';
But this awful overcrowding fairly chains one to the mill
Till you moult and shed your spirit from a body weak and ill
Then before you're hardly planted where the parson mows the grass
There are many fellows striving to the vacant place to pass.

G T W

THE CONSULTANT AND THE GENERAL PRACTITIONER.

To the Editors of THE LANCET

SIRS,—As an old subscriber to your valuable journal and in the interest of the younger members of the profession may I ask the favour of your inserting the following statement of facts in THE LANCET with an expression of opinion from yourself? It seems to me that there should be a recognised code of morals between the consultant and the general practitioner if there is to be maintained that trustful and happy spirit which ought to exist between the two branches of the profession

The case in question is as follows My patient whom I will call Mr A, was laid up with a serious nerve breakdown associated with some curious pains of a rheumatic character After a while some more serious symptoms supervened such as diplopia and paralysis of the external rectus muscle of the right eye I suggested a consultation with a member of a hospital staff and at this consultation it was decided to prolong the treatment of absolute rest for a further period of at least one month. To this the patient agreed with evident satisfaction and continuing treatment for two weeks the patient made sure but slow progress. On a certain morning after my usual visit and without giving me any intimation of his intention Mr A got up and dressed and paid a visit to a consultant in the West-end This gentleman was told that Mr A was under my care and that I had seen him that morning but Mr A brought no letter of introduction or even a card from me. The consultant, however saw him and prescribed for him, ignoring me altogether; the first intimation I had of what had taken place being a letter from the patient telling me that Dr B (not his real initial) had seen him and agreed with me as to his state and had suggested a line of treatment. I declined to continue the case.

Surely Sirs if consultants see patients already under me ment without any letter of introduction from the medi charge it must of necessity place the general practitioner disadvantage with his patient and, further, must generate distrust between two branches of a profession both of whic work happily together During my 30 years practice in t London I have only on one or two occasions been thus treate to hear through THE LANCET the opinion of some mem profession who must be naturally interested in this importan

I am Sirs, yours faithfully,

June 16th 1899 F MONTAGUE

"THE FUND FOR THE RELIEF OF THE WIDOW OF MR. H. KINGSLEY HUNTER, L.S.A."

To the Editors of THE LANCET

SIRS —Kindly allow me to acknowledge the receipt of mentioned donations to this fund, making a total of £97 7s.

I am, Sirs, yours faithfully

RIVERS WILLSON,

42, Wellington square, Oxford, June 20th, 1899

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CLAY AND GLYCERINE AS A DRESSING FOR INFLA CONDITIONS

To the Editors of THE LANCET

SIRS —I understand that a surgical dressing of clay an was very popular in Great Britain some 30 years ago and used quite largely in the army and navy Can you or any of y give me any information on the subject or mention any m bearing on the subject? The dressing or poultice was use inflammation

I am, Sirs, yours faithf

June 6th, 1899

THE MORGAN DOCKRELL TESTIMONIAL FU

THE following subscriptions have been received or promi Fund All subscriptions should be sent to the honorary Mr Ernest Clarke 3, Chandos-street, Cavendish-square W

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